

Commission to Study College Affordability and College Completion
Resolves 2013, Chapter 109

Chairs:

Senator Rebecca J. Millett
Representative Matthea Elizabeth Daughtry

Staff:

Lock Kiermaier

Website: <http://www.maine.gov/legis/opla/collegeaffordability.htm>

Proposed Agenda

October 8, 2014

9:30 AM; Room 202, Cross Office Building
Augusta, ME

1. 9:30 – 9:45: Welcome, Introductions and review of Proposed Agenda
2. 9:45 – 11:15: Panel Discussion on Oregon's "Pay Forward, Pay Back" pilot project's model of funding public postsecondary education
3. 11:15 – 11:30: review options compiled in Template to Facilitate Analysis of Affordability Options
4. 11:30 – 11:45: Update on Affordability Analysis using the Washington State Model
5. 11:45 – Noon: Review draft survey of affordability and completion questions
6. Noon – 1:00: Lunch
7. 1:00 – 2:30: Combined Panel Discussion on Textbook Costs and Current College Fees
8. 2:30 – 4:00: Panel Discussion on the October 2013 "The Game Changers" report prepared by Complete College America.
9. 4:00 to Adjournment: Opportunity for public comment

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Participant Status for Panels to be held on October 8th:

9:45 AM - Pay It Forward

- Sara Goldrick-Rab; Professor of Educational Policy Studies and Sociology at the University of Wisconsin-Madison (by phone)
- Jody Harris; Associate Director, Maine Center for Economic Policy
- John Burbank; Executive Director, Economic Opportunity Institute
- Sarah Pingel; Researcher, Education Commission of the States

1:00 PM - TextBooks and Fees (Combined Panel)

Textbooks

- Dan Sturup, Assistant Vice President, for Auxiliary Services, University of Maine
- Dr. Janet Sortor, Vice President/Academic Dean at Southern Maine Community College
- Daniel Williamson, Managing Director, OpenStax, Rice University (by phone)
- Nicole Allen, Director of Open Education, SPARC, the Scholarly Publishing & Academic Resources Coalition (by phone)
- Dr. Dave Ernst, Director of Academic and Information Technology College of Education and Human Development (CEHD) University of Minnesota (by phone)

Fees

- Ryan Low, University of Maine System
- President John Fitzsimmons, Maine Community College System
- Elizabeth True, Vice President of Student Affairs, Maine Maritime Academy
- Robert Clark, President, Husson University

2:30 PM – GameChangers

- Dominique (Domy) Raymond, Vice President for Complete College America
- Ryan Low, University of Maine System
- Larry Barrett, President, Eastern Maine Community College
- Elizabeth True, Maine Maritime Academy

- Robert Clark, President, Husson University

Provided by
Sara Goldrick-Rab

“PAY IT FORWARD” OR “PAY IT YOURSELF”?

SARA GOLDRICK-RAB

The evidence is clear: the current system of financing postsecondary education in America fails to match the desire of its people or the needs of this ambitious nation. Growing demand for the education and training that college provides has helped propel millions into public institutions providing postsecondary education, which history predicts would lead to calls for a greater role in the provision of that education. Yet as the fraction of adults enrolling in college has increased, college costs have been transferred from government to individuals. In particular, many state governments have decreased per-student appropriations, slashed the fraction of tax revenue devoted to financing higher education, and done little to contain costs at public institutions. These moves put today's students and many future generations at risk of significant debt that could compromise their investments in family, education, and work. In true “perfect storm” fashion, this transfer of responsibility has accelerated as educational requirements for stable employment continue to rise, and real family income slides downward.

It is therefore unsurprising that in some states, politically active members of the both the working and middle-classes are objecting to the most visible evidence of this crisis: the ever-increasing amount of student debt. That debt is accrued even after many families pay out-of-pocket for a substantial portion of college costs, not to mention tax payments that go to state appropriations. Coupled with a weak labor market in which employment for bachelor's degree recipients is slacker in some fields than people might have anticipated, the legitimacy of the current financing system for higher education is being called into question.

While many state legislatures are taking very incremental actions toward change, in a few places political action has been more dramatic. Most recently, in Oregon the legislature rapidly passed a bill called Pay It Forward (HB 3472) that aims to “provide access for all Oregonians to a debt-free degree and protect funding for public higher education. Specifically, the bill directs the Higher Education Coordinating Committee to examine and implement a Pay It Forward pilot program and a tuition freeze.” Pay It Forward is an income-based repayment plan (or what some call a “human capital contract”) modeled on similar efforts in Washington State and California that waives upfront tuition costs for students, instead requiring students to pay up to 3 percent of their income for 24 years to the state (0.75 percent for each year of college attended). Its authors, who include a long-time progressive activist and numerous students intimately acquainted with the near-impossibility of financing college today, are remarkable people who should be thanked for trying to change the status quo.

But the news coverage of the well-intentioned bill has dramatically overstated its promise, while also revealing a substantial appetite among some constituencies for rapid solutions to these pressing problems. Newspapers across the nation—including the *New York Times* and the *Wall Street Journal*—have given it much attention, and Twitter is bubbling with kudos for the state and its advocacy community. Yet, for many reasons, I think that this bill will fail to live up to the high hopes of people advocating for it, and in the meantime mollify and distract reformers from the hard work involved in finding a lasting solution. Thus, even though I think that it is critical to find ways to make college truly affordable for all Americans, I cannot support Pay It Forward:

1. *It is probably not feasible.* The two most difficult challenges it raises are how to fund the transition costs and how to collect the levy on students' payroll. While proponents in Oregon suggest that the \$9 billion needed to start the program could be raised through state bonds, they require voter approval and of course also must be repaid. Moreover once the money is distributed, the state must ensure that students repay. This will require active participation of the Internal Revenue Service (read: highly unlikely) or substantial work on the part of the state.

2. *It may reduce student debt slightly, but will not eliminate it.* This "debt-free" plan only addresses tuition and fees, which amount to about 40 percent of the costs of attendance in public higher education. Students often borrow to cover the remaining costs (room and board, books, supplies, etc.) or have them covered by grant funds. While Pell recipients might be able to forgo borrowing under this new plan, it is very unlikely that other students will. Moreover, the plan is for students receiving up to four years of schooling, yet barely 50 percent of Oregon students complete a four-year degree in six years. Thus, it is highly likely that many if not most students will leave college with loans in addition to this repayment obligation.

3. *It has the potential to exacerbate class-based institutional segregation.* A similar effort pursued at Yale in the 1970s revealed that wealthy students who achieve high-paying jobs do not like income-based repayment schemes. It is unlikely that times have changed, and wealth-seeking students will have an incentive to move from flagship public universities over to the private sector. If this is addressed by instead, allowing students to opt out and pay tuition and fees up front, the plan will become much more costly.

These are flaws in the plan's construction that impede its workability and effectiveness. But the most important reason to reject Pay It Forward is that the plan's approach distracts from the pursuit of a more effective solution that could benefit all Americans—not just those living in Oregon—and helps to fuel an insurgent mantra among critics of higher education who claim we are over-invested: "Pay It Yourself."

Student debt today is high because colleges—both private and public—are charging students for non-academic activities, catering to the small number of families who desire an elite social experience for their children. States have not matched massive federal investments in student financial aid, instead capitalizing

on an apparent willingness among public higher education institutions to transfer their share to students. In other words, both schools (public, private, and for-profit) and state legislatures are complicit in today's crisis, and their impulses are not curtailed with Pay It Forward. Instead, the rhetoric of a "debt-free" public higher education serves to satisfy the left, mute the outcries, and distract public attention from an apparently popular desire to broaden access to postsecondary education by making it truly public.

THE CLAIMS THAT PAY IT FORWARD PROVIDES "FREE" PUBLIC HIGHER EDUCATION

Before getting into the details of the Oregon bill, let's review what the policy framing by the popular press might lead the public to believe it can accomplish.

1. Pay It Forward brings "tuition-free higher education," at least according to Fox News.

2. Pay it Forward provides "free higher education the *right way*" according to Matt Bruenig at the American Prospect, the distinctly other end of the political spectrum.

What is most important about these statements is that while neither is factually accurate, both suggest interest in having more discussion about new ways to bring higher education to more Americans at a lower price. That's exciting, and the search for good ideas is a worthwhile one.

At the same time, it is critical that policy proposals—if they are to be taken seriously—thoughtfully address both the pragmatic details involved and the full range of possible consequences. Unfortunately, the information put forth to date by the plan's proponents is short on details and provide little sense of the potential unintended consequences. Given that, it is remarkable (and telling) how rapidly they have been advanced and accepted.

According to the bill passed by the legislature, Pay It Forward students would forgo paying tuition up front, and instead would pay—regardless of whether or not they graduate—a specific percentage of their earnings (depending on how many years they attended school) to the state for 24 years. It is clear that the total amount that most students would pay is greater than if they had paid tuition and fees up front—presumably a pact that many students might be willing to make, in exchange for the lowered payment amounts and longer payment period (a somewhat similar situation to 30-year fixed mortgages versus shorter-term adjustable ones). The plan is similar to a financing arrangement used in at least six countries, including Australia.

In other words, Pay It Forward is not "tuition free"—it simply changes the timing of tuition payments and creates more *differentiation* in how much tuition individual students pay. Nor does Pay It Forward offer "free higher education," since not only must students pay the costs of tuition and fees later, but the



costs of room and board, books, and other expenses (amounting to 60 percent of the typical college bill) are not covered at all.

THE STATUS QUO: TUITION AND FEES ARE ONLY A FRACTION OF COSTS

Many Americans might have done a double-take at the last sentence. Yes, tuition and fees constitute the *minority* fraction of the costs of attendance at public universities. Take the University of Oregon, for example.

Tuition and Fees = \$9,830

Room and Board = \$10,722

Books and supplies = \$1,050

Other expenses = \$2,430

TOTAL Cost of Attendance= \$24,075

Reasonable people might disagree over who should cover the costs of room and board for college students, but the fact remains that they must be covered primarily through sources *other than work* if the average student is to succeed in completing a degree. Undergraduates rarely secure jobs paying more than minimum wage, and if they are to have time to devote to studying, they should not work more than 20 hours a week—and for those with weaker academic skills in need of tutoring, far less. For students in today's economically vulnerable families, who depend more heavily on one another for support, time for working is increasingly crowded out by the need to care for both older and younger family members. And summer work is not a likely option, since many students need to take classes in order to get hard-to-access courses completed, retake failed courses, or complete enough credits to finish in four years.

So, given all of those stipulations, let's assume an undergraduate is willing and able to work 20 hours a week at minimum wage. After taxes, the student will earn just under \$7,000 a year. Even with payment of tuition and fees delayed until after graduation, their wages would only cover about half of their costs of attendance. The other \$7,000 remains: if Pell-eligible, the student may have that covered with federal aid, but if not, the family either pays it or borrows it. That's right: under Pay It Forward, the average student will still need to work 20 hours a week and pay about \$28,000 (somehow) in order to get a bachelor's degree—after which, up to 3 percent (maybe more) of annual income will be taken by the state for a period of 24 years.

Is this worse than the status quo? Maybe, depending on who you are and what the actual percentage ends up being (more on that in the next section). A few facts regarding the policy's intended resolution of student debt are necessary to understand why it will not significantly improve the current situation:

1. *The crisis in student debt is not mainly in the public sector.* The \$1 trillion in total debt resides mainly with two groups of students: poor students attending for-profit universities, and those engaged in a long period of education, including graduate school. Neither of these are addressed by Pay It Forward.

2. *A federal, income-based repayment (IBR) option already exists and is underutilized.* There are two main issues confronting students in public universities with debt. First, large numbers do not finish their degrees, making repayment much harder. Second, those who graduate do not opt for the existing income-based repayment plan, instead paying substantial amounts of their income over a short period of time, even when unemployed. This puts them at risk for delinquency or default. But there is already a solution: the federal IBR option, which prevents delinquency or default entirely by making monthly payments conditional on income and capping payments at no more than 15 percent of income. The repayment period is often far shorter than Pay It Forward's, but only a small fraction of borrowers has enrolled in IBR, seemingly because many do not know about it. Presumably IBR would continue to exist under Pay It Forward and payments for the Oregon program would not be counted as debt (since it is not called a loan). In this case, students would be enrolled in two "affordable" repayment plans but have to make debt service payments approaching or in excess of what either program considers "affordable."

3. *Private providers already offer very similar options to students.* There are at least two firms in the private sector that make these investments in students, but instead of putting taxpayers on the hook for the risk that students will not repay, investors can choose to invest or not invest in a given student based on their comfort with the likelihood that the student is a good risk. These firms use variable-rate rather than flat-rate risk pricing to protect that investment. It is not clear that a flat-rate scheme is better for the majority of students, or good for the state, and I strongly suspect the rate will therefore climb substantially over time as problems with the initial calculations are realized. Consider whether you would support this plan if the amount that must be repaid were 5 percent, 10 percent, or even higher? With this option already available to students yet not remotely popular, why should the state get involved?

4. *Parents of students in the public sector often*



hold more debt than their students. The amount students can borrow each year is capped such that middle-income students rarely borrow more than \$5,000 a year. But parents face fewer restrictions, opting for the Parent Plus Loan and private options, financing up to \$15,000 or more a year. The real crisis may lie with parents affected by debt accrued for their children—and if anything, Pay It Forward may most suit their needs by passing more costs to their children.

The truth is that, despite lofty promises, Pay It Forward has the potential to do very little if anything about the significant burdens facing higher education's key stakeholders.

THE BURDEN ON THE STATE

Income-based repayment programs are difficult to particularly implement for two reasons. First, they require a great deal of upfront cash. You cannot loan out money you do not have. Reports indicate that Oregon must raise at least \$9 billion to get this program started, and yet the proposals provide no indication of where it might come from. I am told that the likelihood source is state bonds, which of course require repayment as well. Perhaps even more importantly, \$9 billion is very likely a significant underestimate of the actual costs. One key issue is that only about half of entering undergraduates in Oregon public universities turn into graduates over a six-year period—so it repayment will be slower to accrue and likely lower than anticipated. In addition, the projected earnings trajectories by age on which the repayment calculations are made need to reflect the demographic at hand—they are based on averages yet the majority of today's graduates are women, and they continue to earn less and take more time off from employment for childbearing. The less that graduates pay back, the more the program costs up front. Moreover, I doubt that students will tolerate such a lengthy repayment period, and if it is shortened, the costs go up. Thus, if \$9 billion is an estimate based on high four-year graduation rates, uses average earnings rather than for a predominately female group of students, and assumes a maximum of 3 percent then it is substantially under-stated.

Sometimes the best intentions go awry, and in this case it is possible that instead of state bonds, the Oregon Legislature could opt for a funding source mentioned by advocates in Washington State: ending need-based financial aid in the form of grants to low-income students. The consequence? Students from low-income families would have to pay even more for their own education. That's one way of leveling the playing field, but not one that many progressives would support.

Second, there must be a mechanism for collecting the money loaned to students. This is an enormous undertaking, and one far harder to accomplish as an individual state or in a nation as large as the United States. (Australia—one country where a similar plan is in effect—is not a reasonable example in this case.)

The challenge of recollection is not a hypothetical, and it is not a small or inexpensive concern; in fact, an American example suggests that the wealthiest students will be the ones most likely to try and abdicate on repayment. In the 1970s, Yale University instituted a Tuition Postponement Option, developed by Nobel prize-winning economist James Tobin, designed to “help needy students afford an Ivy League education in a way that wouldn't discourage them from pursuing worthy low-paying careers.” Similar to Pay It Forward in concept, it effectively backfired, as students who did well with their Yale education refused to repay, and bad-mouthed the program. Incredibly, beneficiaries publicly denigrated it as a terrible financial tool, and drew parallels between its longevity and the lasting power of some sexually transmitted diseases! We can expect today's wealthy alumni to do the same, and demand an opt-out mechanism, which will undermine the program's financial stability if granted.

Certainly, the participation of the Internal Revenue Service would greatly help this effort, but gaining that participation is no small feat—and the IRS will have a substantial burden to carry.

THE BURDEN ON STUDENTS

Let's say the proposal is funded and moves forward. What next? In terms of consequences for students, the biggest change is that tuition and fees will be paid post-graduation (or post-dropout, since despite media reports, all students will pay, not only graduates) and the amount paid will depend on one's income over the next 24 years. There are several possible positive benefits, including: reducing fears of sticker price among some students, allowing families to save for a longer period of time to pay college costs, lessening student debt, and creating an incentive for students to opt for less lucrative fields for their jobs and careers or stay home to raise kids.

But these potential benefits are overwhelmingly hypothetical. Colleges and universities will still have to disclose the remaining cost of attendance, which will be substantial, so sticker shock will remain. As noted earlier, most students will still have to borrow money to pay those costs, or families will have to pay them out of pocket. Rather than saving for future tuition payments, trends in family dynamics suggest that parents are just as likely to reduce their obligation to contribute to their children, since once they are employed they are “on their own” as adults. In this case, the share of college costs paid by parents rather than children may decline. In fact, this seems to be an intention of the plan, as it proponents are careful to highlight the rising amount of student debt held by parents. Finally, there is little evidence that income-based repayment plans succeed at changing occupational choices—they provide a reward to people who opt for socially valuable but less lucrative careers, but do not induce them to choose them over other options.

In addition, many middle-class students who currently pay for college at least partly out of pocket may pay a larger sum of money for their tuition and fees under the plan than they do currently. A graphic in the *Wall Street Journal* makes this clear:

while median debt among borrowers hovers around \$25,000, the average student paying it forward will pay an extra \$7,400 for the longer repayment period. (Moreover, these numbers are likely understated since they do not adjust for net present value.) For students with currently lower-than-average debt loads and higher than-average earnings, the costs will be higher. The real beneficiaries might be those students borrowing more than the average amount to attend college while earning less than average post-graduation—but this hinges on their ability to cover their costs of attendance outside of tuition and fees without borrowing. If they borrow, the apparent benefits of this plan will be diminished. And if the repayment percentage rises, and it easily could, this calculus adjusts yet again.

PAY IT FORWARD'S TROJAN HORSE

Oregon is getting a remarkable amount of praise for this plan, and undoubtedly its legislators are thrilled. The plan calls for the state to continue to invest in public higher education going forward, the part of the deal that is arguably most critical. But the real “pay it forward” in the plan is the goal that today’s students will create a “stable funding stream” for tomorrow’s students—relieving the state of the need to do so. Critically, the plan’s authors call it a plan of “shared responsibility.” Given that they are students, it is likely that they mean to imply that the state will do more to participate—but the state in this case may forecast the opposite—a willingness of students to do even more to pay for college themselves.

After all, Oregon has taken steps in recent years towards the privatization of public higher education. The share of general fund monies going to higher education in Oregon declined from 17 percent in 1997 to 5.8 percent in 2009. It is a laggard, falling in the bottom 20 percent of appropriations per FTE. Moreover, Republicans have endeavored to exert less direct financial oversight and administration of public universities in the state by altering the governance structure, which could lead to further cost escalation. But this isn’t unusual these days, as most states seek to justify their disinvestment in higher education and seek ways to take it further. What better evidence that the state could get away with doing even less for students than observing those same students agreeing to cover the costs themselves, out of their future income?

Lest this sound overly cynical, consider the case of Virginia, where the flagship university argued that by doing more itself, state support would increase. In fact, the more financial independence the university took on, the less support it got—students and families pay a larger fraction of college costs in the state than ever before.

The key here is that the Oregon plan requires students to pay their future income back to the state for decades to come—but does not obligate the state to continue its investment. This is unsurprising, since from their inception by economist Milton Friedman these “human capital contracts” have treated higher education as a private good. While the state may not raise the

repayment percentage paid by current students, it can certainly increase it for future students—and it will have every incentive to, as long as public objections remain relatively quiet.

In other words, there is a possible dark side of the proposal getting insufficient attention: some Oregon legislators seeking to spend less on higher education may be supporting Pay It Forward in order to simultaneously quell public outrage about student debt, garnering positive media attention and votes, while also increasing the fraction of higher education costs paid by students and families.

REDUCING EDUCATIONAL INEQUALITY, OR EXACERBATING IT?

There rhetorical approach used to describe Pay It Forward is notable: it is “not a loan” but rather a “social insurance program.” Use of that social insurance will purportedly reduce barriers to college attainment and promote equality. How will this occur?

In fact, Pay It Forward seems most likely to benefit the parents of students from middle-income families who are currently taking on PLUS loans that are not subject to income-based repayment now. If they transfer their current financial contributions (before loans) to helping their students fund their other costs of attendance (most likely to help them avoid the need to work) and they do not offer to contribute to the payments post-college, then their own borrowing will lessen. But importantly, this will be achieved by transferring the burden to their children—not by getting rid of it entirely.

Even more importantly, however, the policy has the potential to increase the institutional segregation of students based on family income. Students from wealthy families at public institutions do not accrue much debt now—they pay out of pocket—and they could pay more under Pay It Forward. In fact, that is precisely the intention of the model: as one reporter described it, “Just like a venture-capital portfolio that earns its profit from a few star investments, many students would end up underpaying the cost of their college, subsidized by the school’s star businessmen.”

As illustration, consider that with annual tuition and fees of about \$10,000 they currently pay about \$40,000 in tuition and fees for a bachelor’s degree at public institutions. If they go on to average \$80,000 per year over the next 20 years, they will have paid almost \$48,000—and if they earn more, they will pay more. The value of paying that money out more slowly over time may convince them that it is worth remaining in public higher education, but it is just as likely that they will perceive a disincentive to stay in a system that capitalizes on their future earnings in this way, when private institutions offer them the easier option of having their parents pay now. If the students with the greatest earning power face incentives to leave the public sector (as suggested by the Australian experience) the long-term sustainability of Pay It Forward may also be in question. Worse yet, the model will likely allow wealthy families to ‘opt out,’ exacerbating the current situation in which some students graduate with no debt, and others pay off college for decades.



Admittedly, many of the concerns raised here are hypothetical ones. But this proposal is entirely hypothetical. The plan for a demonstration program is a weak one, since it would be impossible to extrapolate the findings from an experiment done with a few universities to implications for either a state-level or national policy, and it would be unethical and impossible to properly assess effects using methods like random assignment in order to get clear evidence of effectiveness.

THE POLITICAL CONSEQUENCES OF PAY IT FORWARD—PAY IT YOURSELF

It may seem to the reader a bit odd for a scholar like myself, so concerned with finding ways to make college more affordable, to argue so strenuously against a seemingly progressive policy. Fully explaining my reason for engagement requires a brief discussion of the political economy of “Pay It Forward” plans.

For forty years, a quiet revolution has redefined individual value as residing in “human capital,” a commodity rather than part of an integrated society. As such, advocates of higher education have willingly embraced a narrative that says those who benefit shall pay. The effect of this model has been an increasing focus on the wage premiums accruing to college degrees, growing efforts to document individual-level returns across and among individuals rather than impacts on society, and the development of a student loan industry that makes it possible for colleges and universities to raise costs without losing enrollment.

We have lost sight of two critical things. First, there is a broad societal function of education: ensuring that our democracy has informed voters capable of full participation. A focus on that function means funding public postsecondary education through taxation, shared progressively across all citizens of a state. Furthermore, it means constraining those public institutions from developing elaborating university activities while enjoyable for participants, putting college beyond financial reach for the general public. A focus on high-quality postsecondary learning with few extras, no frills, could be provided and publicly supported with a true social compact, one involving all key partners, including the federal government. Turning the energy around this proposal into a constructive plan that moves toward that goal would be a smart move.

In addition, institutional behaviors matter for the success of their students. Pay It Forward does nothing to address the numerous challenges created by the actions of colleges and universities, including those in the public sector, and even lets states off the hook for monitoring those behaviors. It is predictable but unfortunate that the proposal includes no accountability for either states or higher education institutions. In fact, their abdication of responsibility for college affordability over the last forty years is why we are in this mess in the first place.

Unfortunately—and I think unintentionally—Pay It Forward subscribes to the same old narratives and assumptions of the current system. Not only is it silent on the matter of college costs

and taxation and does nothing to increase the government role in shouldering the burden of costs, but the solution it offers is for students to help themselves. As one of the student authors of the plan told the *New York Times*, “When we talked to legislators, conservatives said it appealed to them because it’s a contract between the student and the state, so they see it as a transaction, not as a grant.” That’s partly right—it is a transaction, one that requires repayment, and most certainly is not a grant. But it is also not a two-way contract between students and the state, it is one-way, and largely student to student. Instead of Pay It Forward, it might be called Pay It Yourself.

The short-term benefits of the plan could be undermined by the longer-term political consequence of silencing the fire raging among those seeking a real long-term solution. It is very unlikely that Pay It Forward will be financially possible, initially or over the long haul, but it is quite likely that popular appetite for the program will satiate enough people to keep them from working day and night on better solutions.

In other words, my largest concern is that neutering the powerful voices of middle-class families outraged about skyrocketing debt and high tuition with a Pay It Forward approach is politically convenient and could unintentionally cripple real progress toward real solutions. It conveniently skirts issue of high college costs by emphasizing the flexible, long-term nature of the repayment plan, and obscures discussions of rising tuition entirely. In fact, college graduates will pay under this plan—and they will pay far too much. Today, investments in postsecondary education are not private transactions but rather are public ones, and the social insurance policy we need is one that combines truly free tuition and fees with need-based financial aid.

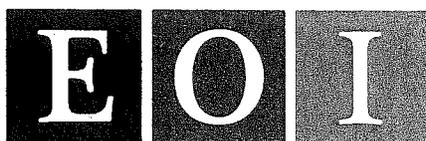
This article was originally posted at:
<http://tcf.org/work/education/detail/pay-it-forward-or-pay-it-yourself/>

SARA GOLDRICK-RAB is associate professor of educational policy studies and sociology at UW-Madison. She is also the Senior Scholar at the Wisconsin Center for the Advancement of Postsecondary Education, and an affiliate of the Institute for Research on Poverty, Center for Financial Security, LaFollette School of Public Affairs, and Wisconsin Center for Educational Research. She is also the Project Director for the What Works Clearinghouse’s expansion into postsecondary education. As a scholar-activist and sociologist with a deep commitment to bringing research into policy and practice, Dr. Goldrick-Rab’s research explores policies aimed at reducing socioeconomic and racial inequalities. She was named a 2010 William T. Grant Scholar for her project “Rethinking College Choice in America.” She was also a 2006 National Academy of Education/Spencer Foundation postdoctoral fellow.

She is the co-author of *Putting Poor People to Work: How the Work-First Idea Eroded College Access the Poor* (Russell Sage,

2006), which was a finalist for the C. Wright Mills award. Her research has been published in journals such as *Sociology of Education and Educational Evaluation and Policy Analysis* and been financially supported by the Bill and Melinda Gates Foundation, Spencer Foundation, American Educational Research Association, William T. Grant Foundation, and many others.

Goldrick-Rab was a member of The Century Foundation's Community College Task Force, whose report, *Bridging the Higher Education Divide*, offered suggestions for strengthening the nation's community colleges. She also contributed a background paper for the report: "School Integration and the Open Door Philosophy".



Economic Opportunity Institute

Memorandum

To: Commission to Study College Affordability and College Completion
From: John R. Burbank, Executive Director, Economic Opportunity Institute
Regarding: Pay It Forward Study, S.P. 748
Date: October 6, 2014

Thank you for your invitation to present about Pay It Forward at the Commission meeting on October 8th.

Since the Maine Legislature passed S.P. 748, the Oregon Higher Education Coordinating Commission has recommended a Pay It Forward pilot project to the State Legislature for funding. Here is the [report cover memo](#), the [report itself](#) and the [draft transmission letter](#).

Maine public higher education institutions present great opportunities for launching Pay It Forward. One reason is that Maine tuition levels, while having increased over the past decade, remain well below the tuition levels in Washington state public research universities. While tuition and fees at the University of Maine are now \$10,600, tuition and fees at the University of Washington are \$2,000 more. As a result, a Pay It Forward pilot project funded at the same level in Maine as, say, Washington, could incorporate hundreds of more students in your state. This results in many more Pay It Forward graduates and much more robust contributions to the Pay It Forward public higher education trust fund. As you know, this trust fund would in turn provide access to higher education for even more students in the next generation.

We have attempted to design this model for Pay It Forward such that

- It can be implemented in a fiscally feasible and responsible manner.
- Most importantly, this pilot creates access to higher education for lower income and middle class students, as well as workers who seek higher education, all of whom may be shut out of traditional avenues for access and financial aid.

It is important to note that Pay It Forward's transition costs will result in up-front costs. How these are recovered or not recovered over time depends on many factors outside the Pay It Forward model, such as cost of tuition, income growth or stagnation, overall state funding of higher education, and the level of general taxation through which Pay It Forward graduates contribute to public services in Maine.

When considering the transition costs, we note that

- Pay It Forward could attract dedicated private funding with no strings attached, which would not be available for other higher education financing.
- Pay It Forward, unlike other higher education financing mechanisms, will eventually become self-sustaining.

Building an economy that works – for everyone.

603 Stewart Street Suite 715, Seattle, WA 98101 | 206-633-6580 | www.eoionline.org

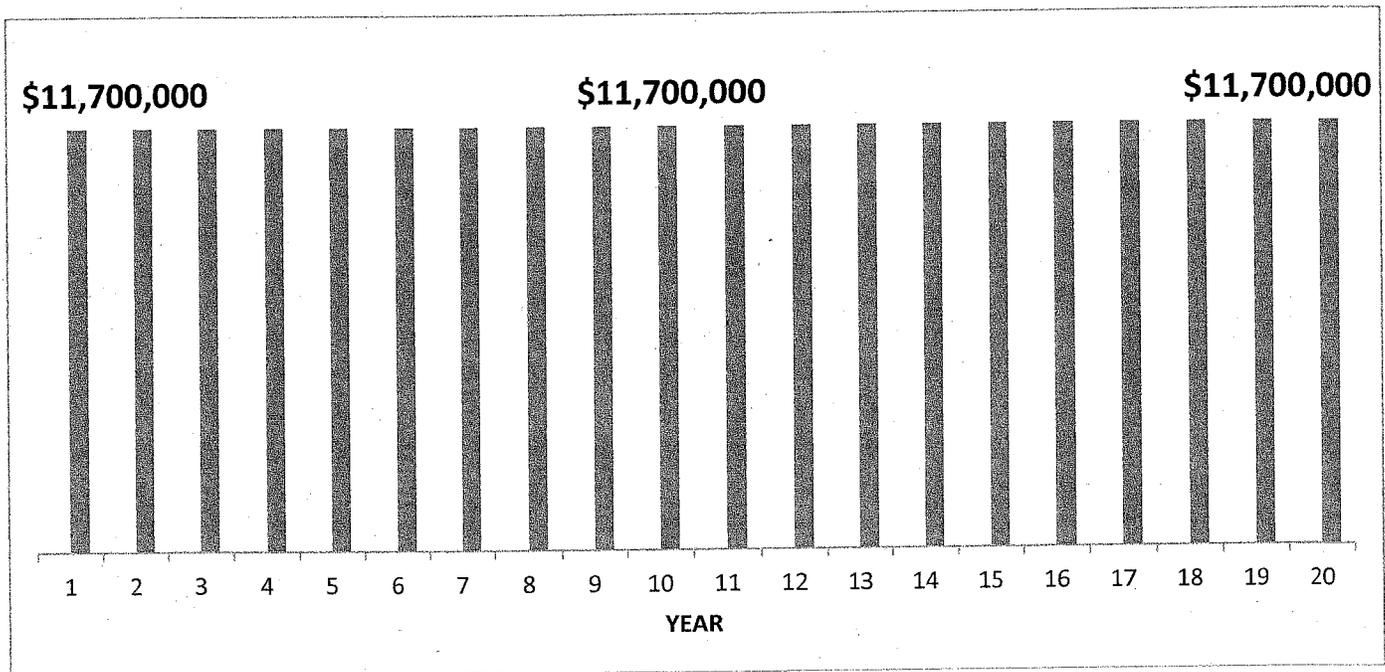
11

Another approach to these questions is to consider a Pay It Forward program with a steady constant dollar appropriation each year. With this approach, we do not worry about recouping transition costs or the tailing off of state appropriations. Instead, we begin with a constant annual investment for a certain number of students. Each year, on top of that investment, Pay It Forward contributions are added and these contributions grow over time. As a result, the number of students covered under Pay It Forward also grows over time, such that within 18 years, for the same annual investment, twice as many students are benefitting from Pay It Forward.

Where would this initial appropriation come from? One possibility is to look at the endowments of public higher education institutions. For example, the University of Maine's endowment is about \$234 million. If 5% of this endowment¹ (\$11.7 million) was allocated to Pay It Forward, it would enable 1100 students to attend the University of Maine. (Similarly, the Legislature could simply allocate \$11.7 million a year, every year. But by directing a certain percent of the endowment, the transition costs for PIF may not require an appropriation from the general fund.)

With an annual investment from the endowment of \$11.7 million, contributions by Pay It Forward graduates would be added on top of that annual amount. As a result the population of students on Pay It Forward would roughly double in 20 years from 1,100 to over 2,000 students **with the same constant dollar funding from the endowment**.

The annual designation of funding for Pay It Forward would look like this:

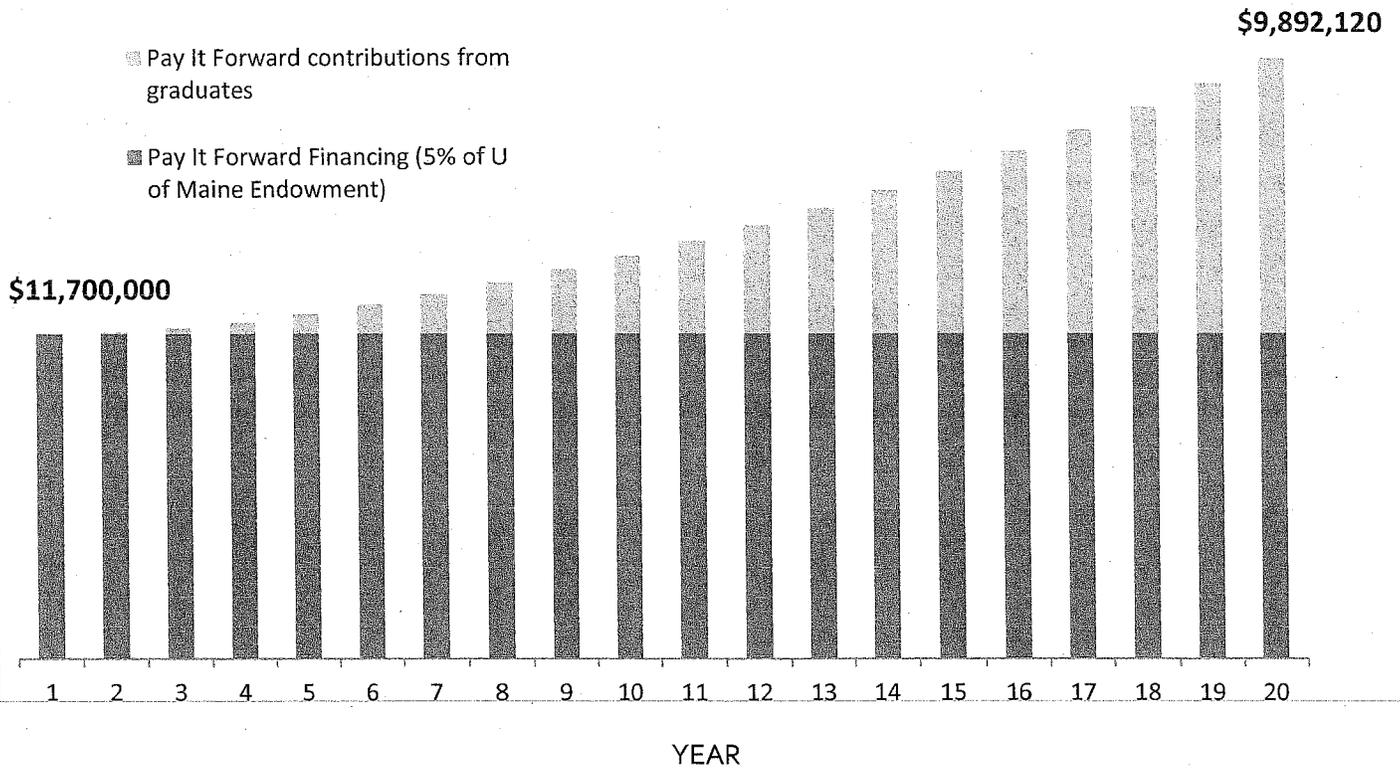


This funding would generate the following aggregate funding for Pay It Forward:

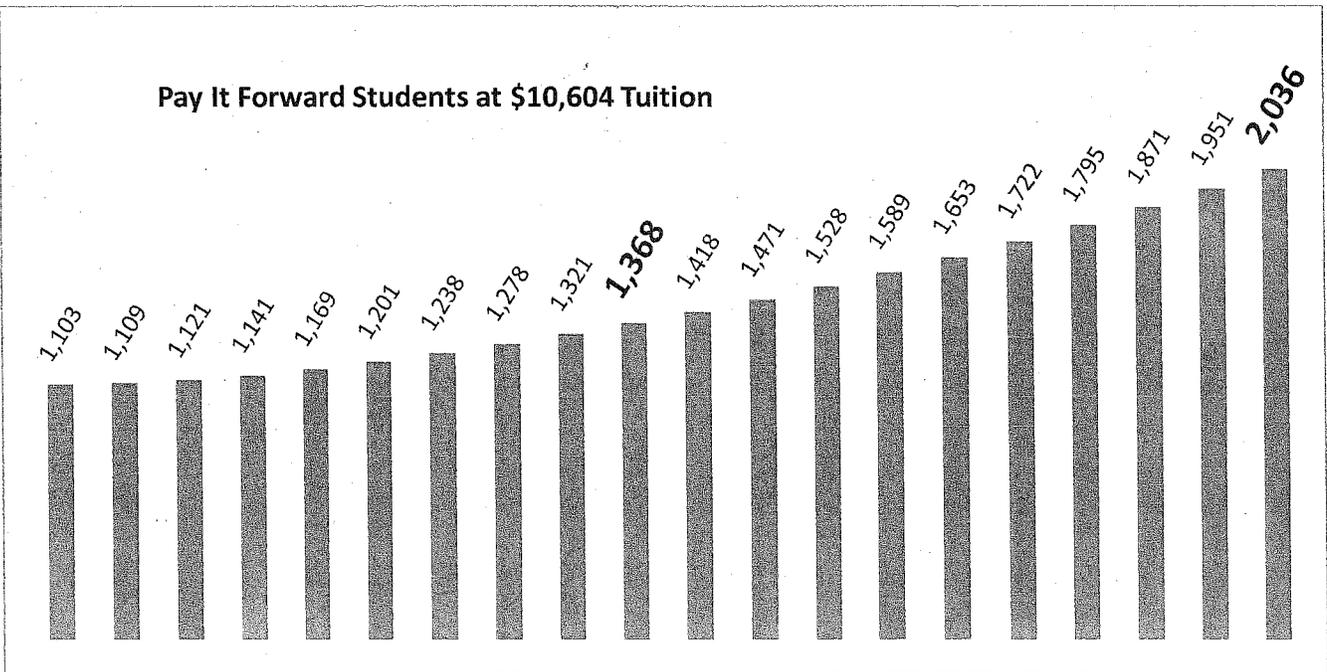
¹ The University of Maine's managed investment pool achieved a 12.7% net return in 2013.

12

Pay It Forward Funding with \$11.7 million annual designation (5% of U of Maine Endowment) and contributions from PIF Graduates



This would enable the follow enrollment of students in Pay It Forward, which in turns enables the increase in funding illustrated above:

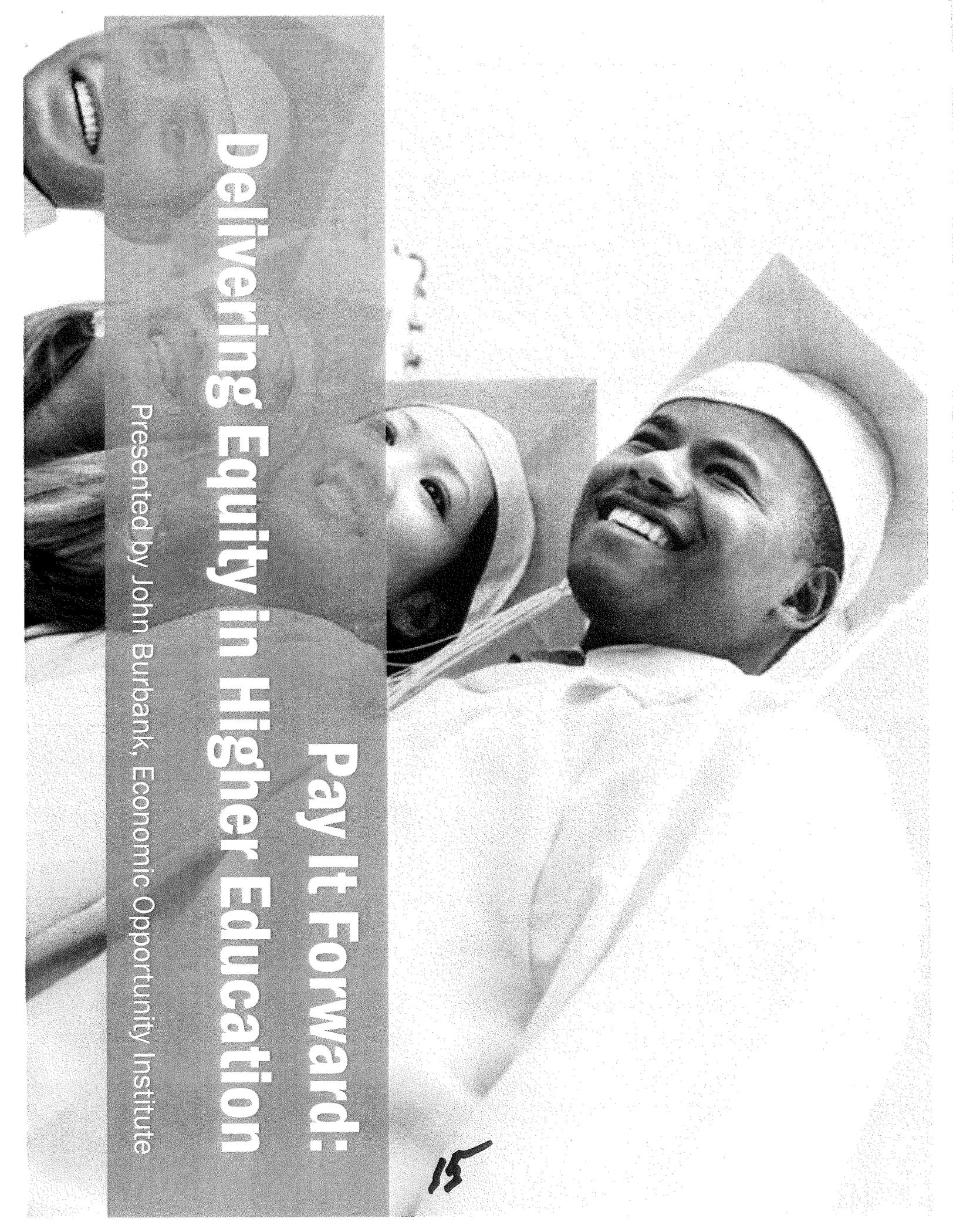


13

We hope that this simple modeling can inform your forthcoming consideration on Pay It Forward. We are happy to provide further detail and iterations as requested.

Thank you for your work and dedication to enabling access to and opportunity for higher education in Maine.

142



Delivering Equity in Higher Education

Pay It Forward:

Presented by John Burbank, Economic Opportunity Institute

15

What Pay It Forward Isn't

- Pay It Forward is not financial aid
- Pay It Forward is not just for low income students
- Pay It Forward is not directive in studies
- Pay It Forward is not a loan, not a debt obligation

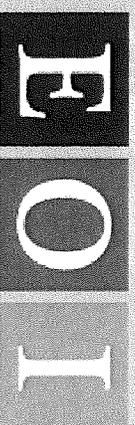
11



What Pay It Forward Is

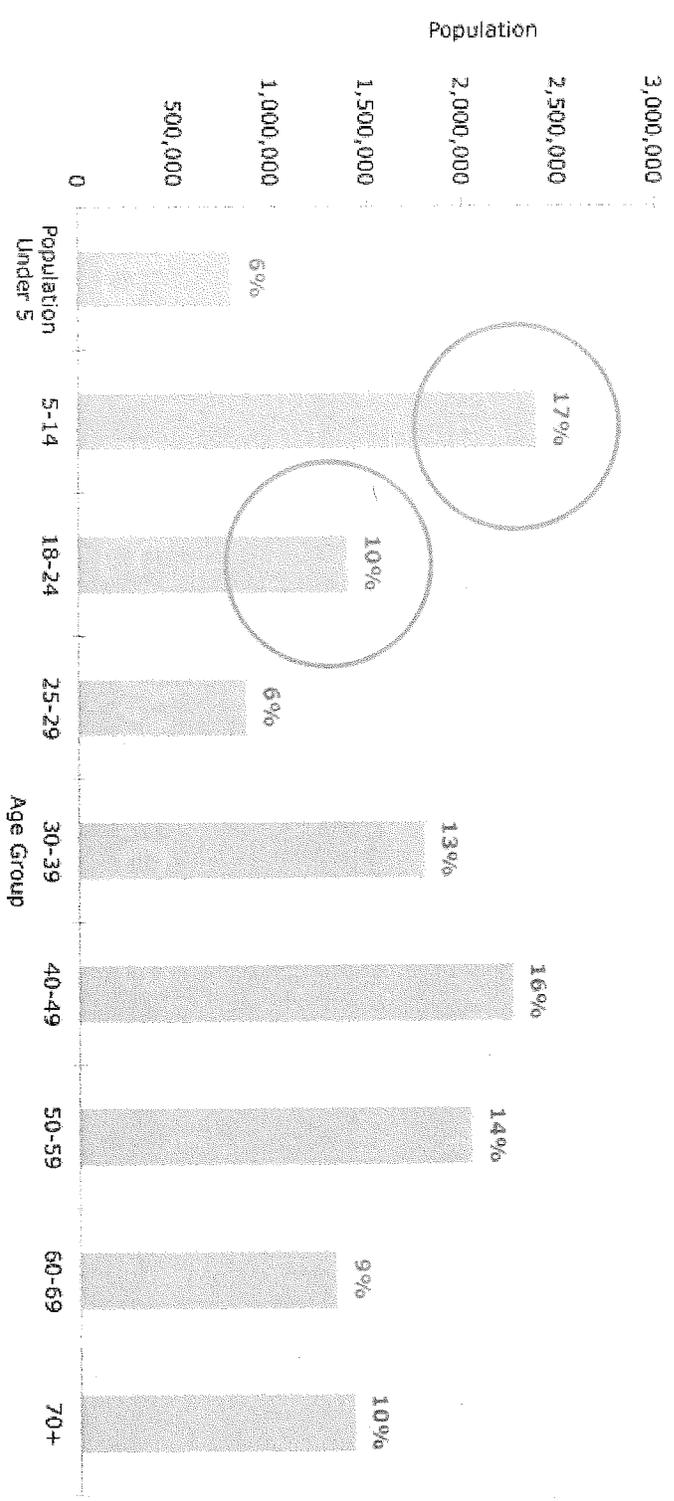
- Enables college entrance by knocking down financial and psychological barriers to higher education
- Enables college completion by eliminating debt financing of tuition
- Completely transparent and predictable
- Enables alignment and contiguity of studies
- Integrates with other means of financing higher education

11



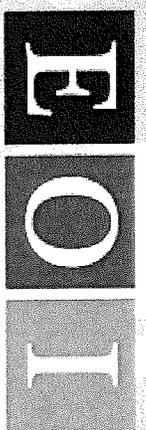
New England Demographics

Figure DEM 4: Population of New England by Age Group and as a Percentage of Total Population, 2011



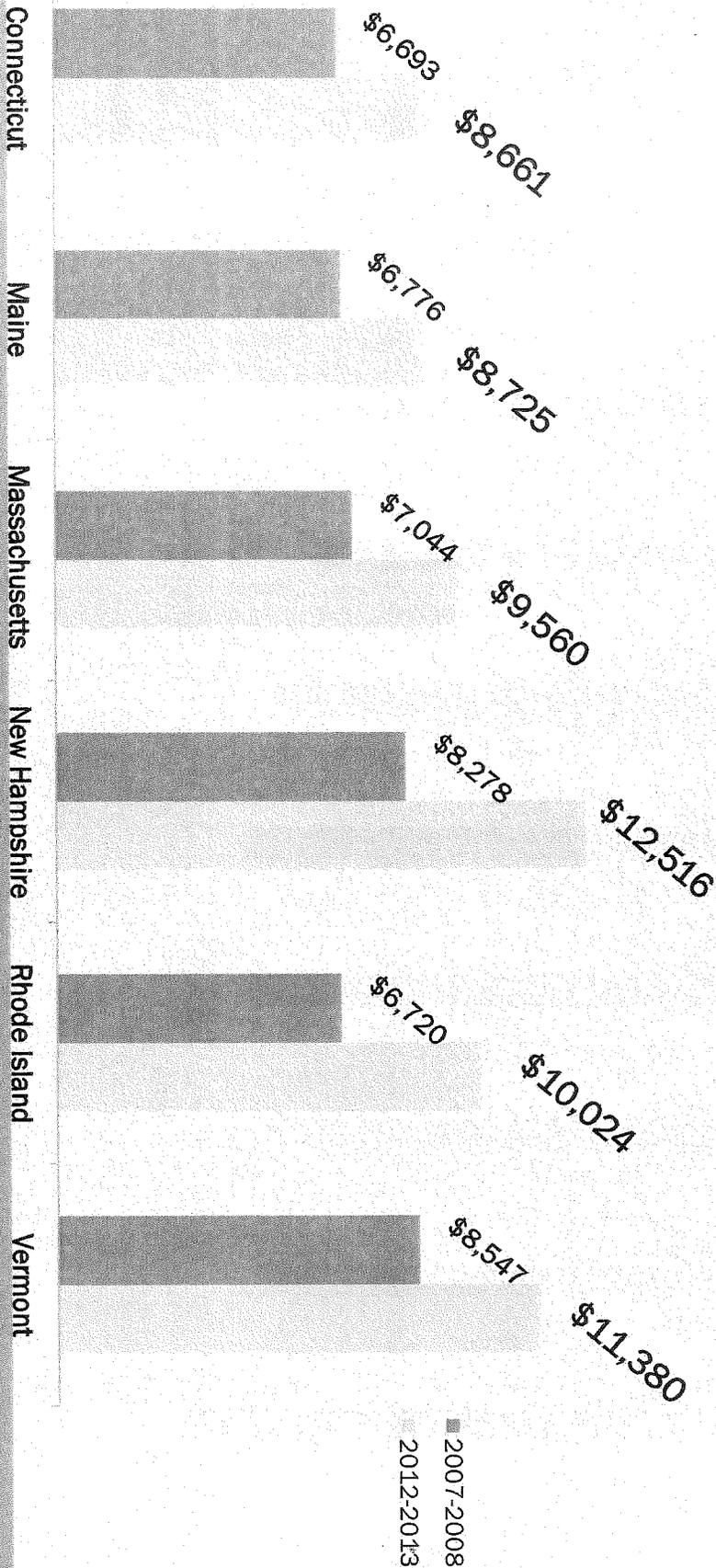
Source: New England Board of Higher Education analysis of 2011 U.S. Census data and American Community Survey 5 year estimates.

18

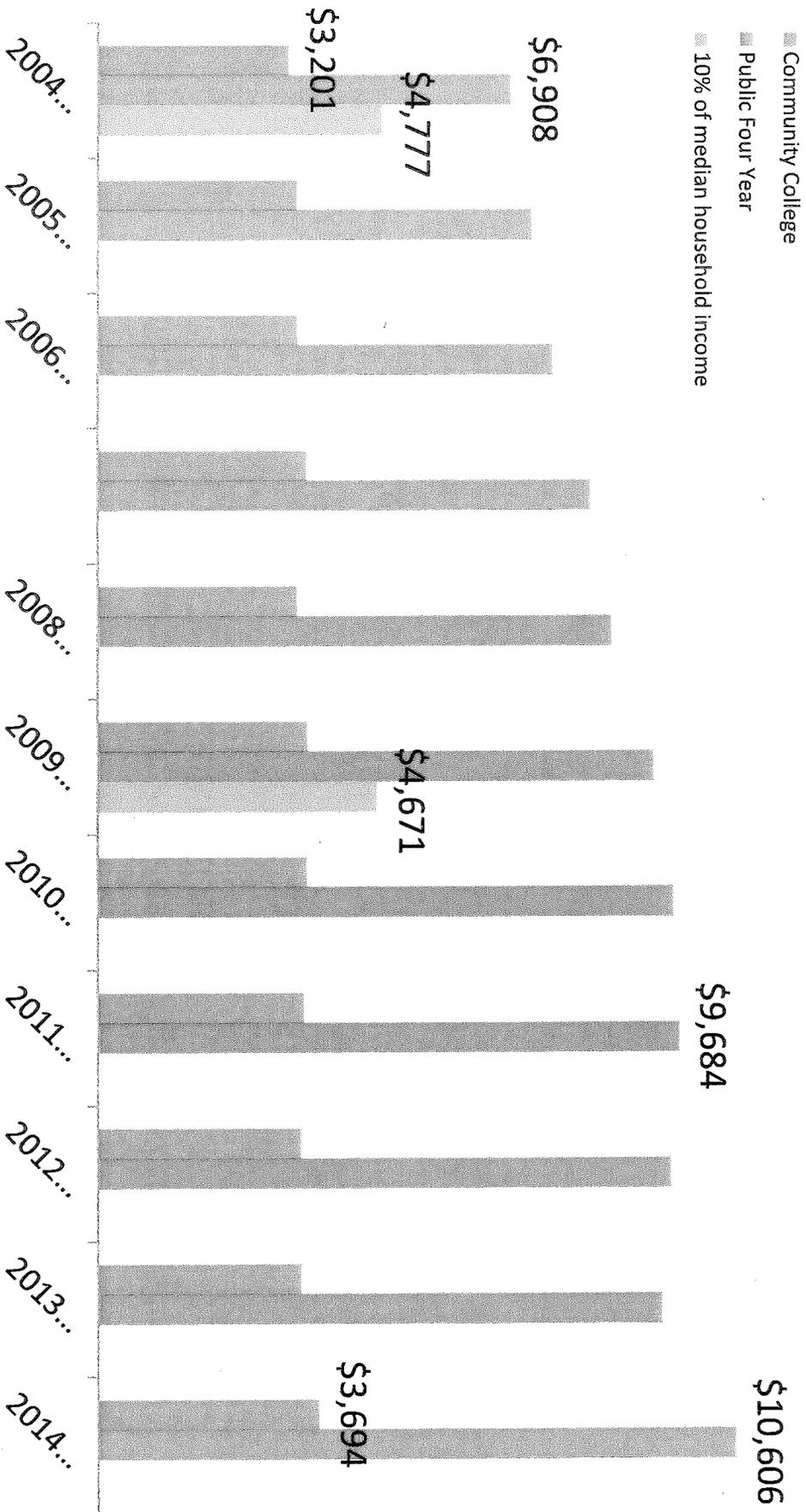


A system in crisis

Tuition at New England Public Four-Year Colleges and Universities
2007-08 to 2012-13



Tuition and Fees in Maine Higher Education



How Pay It Forward works

Abolishes upfront tuition costs

Replaces tuition with post-completion income contributions

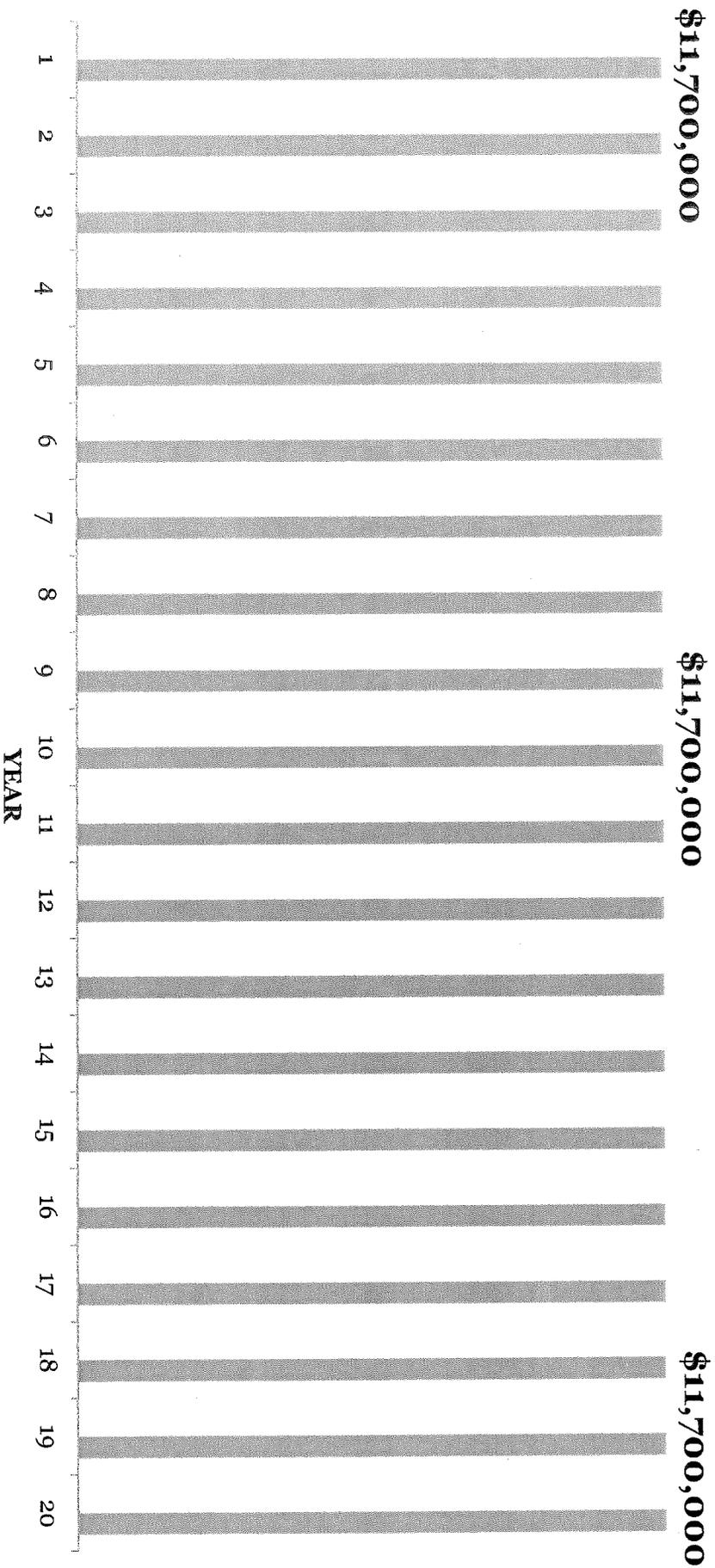
Contributions are placed in a public trust fund that finances future students, eventually generating net revenue

21

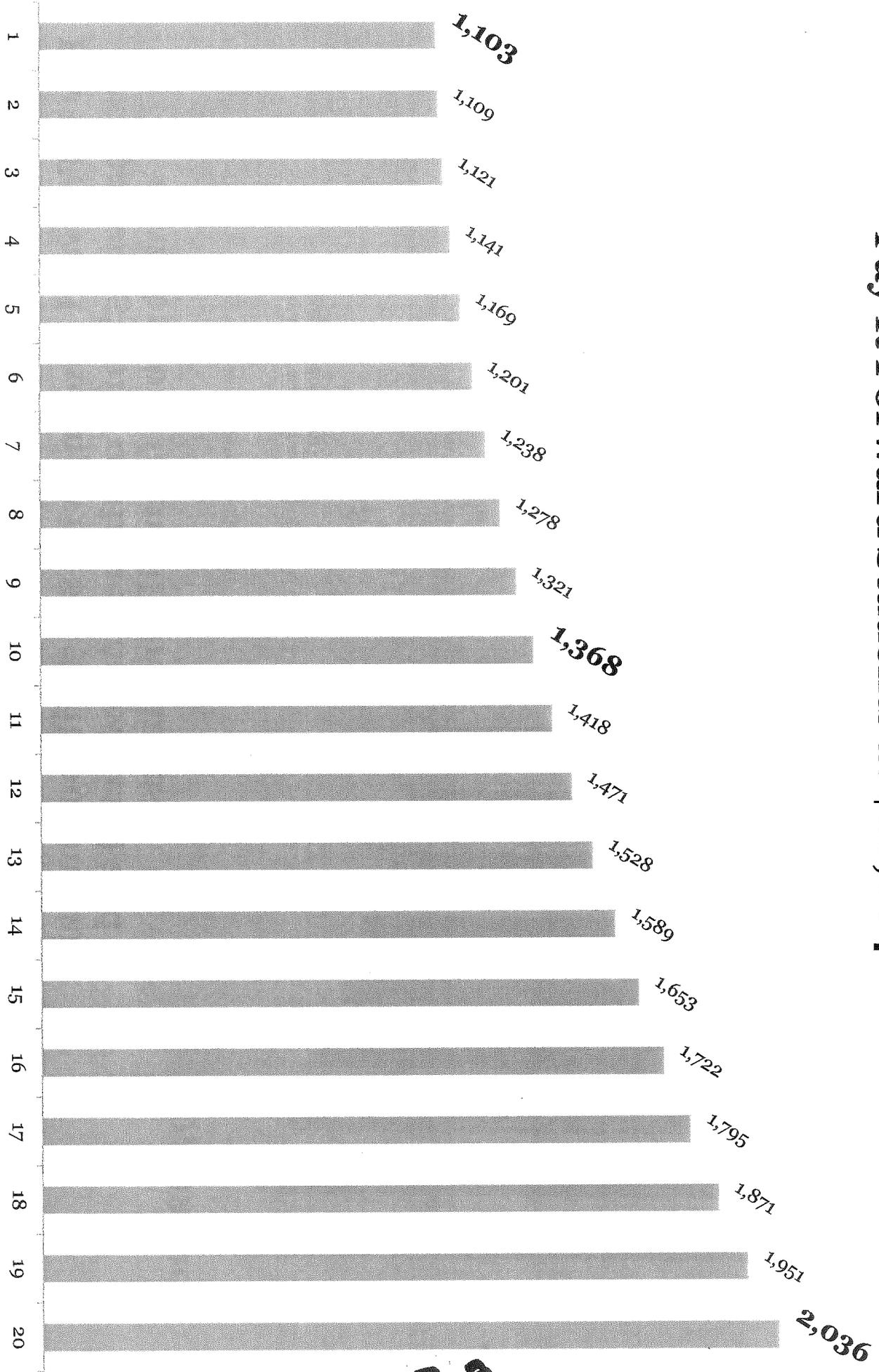
E O I

Economic Opportunity Institute

5% of University of Maine Endowment



Pay It Forward Students at \$10,604 Tuition

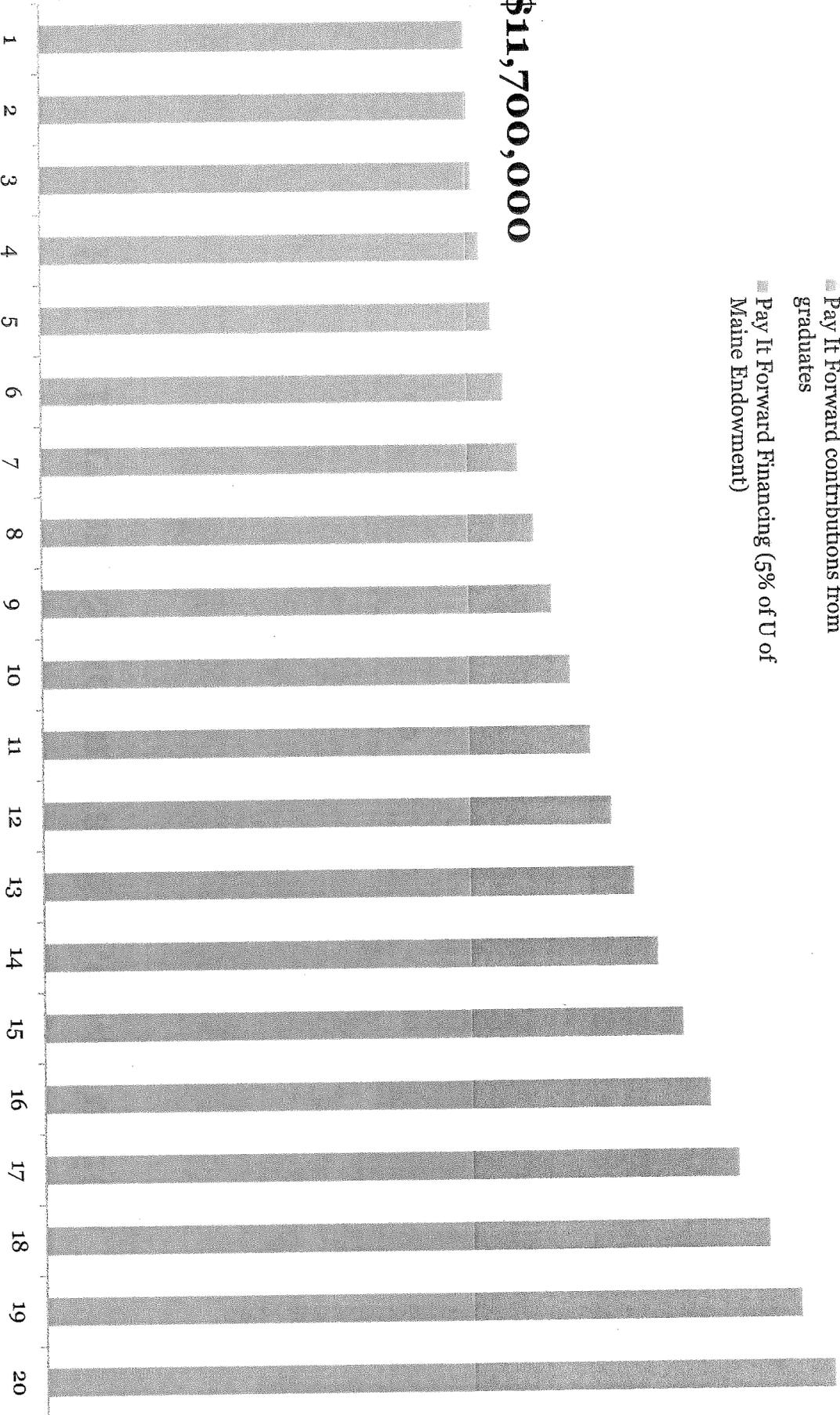


Pay It Forward Funding with \$11.7 million annual designation (5% of U of Maine Endowment) and contributions from PIF Graduates

\$9,892,120

- Pay It Forward contributions from graduates
- Pay It Forward Financing (5% of U of Maine Endowment)

\$11,700,000



Pay It Forward Interactive Calculator

PIF Program

Benefits:

Annual Tuition:	\$10,604
Real Rate of Change:	0.00%
Years Covered:	4

Basic PIF Program:

Contribution Rate:	4.00%
Deferred Years:	3
Real Income Change:	1.00%
Adverse Selection:	5.0%
Non-Contributors:	3.0%
Contributing Years:	20

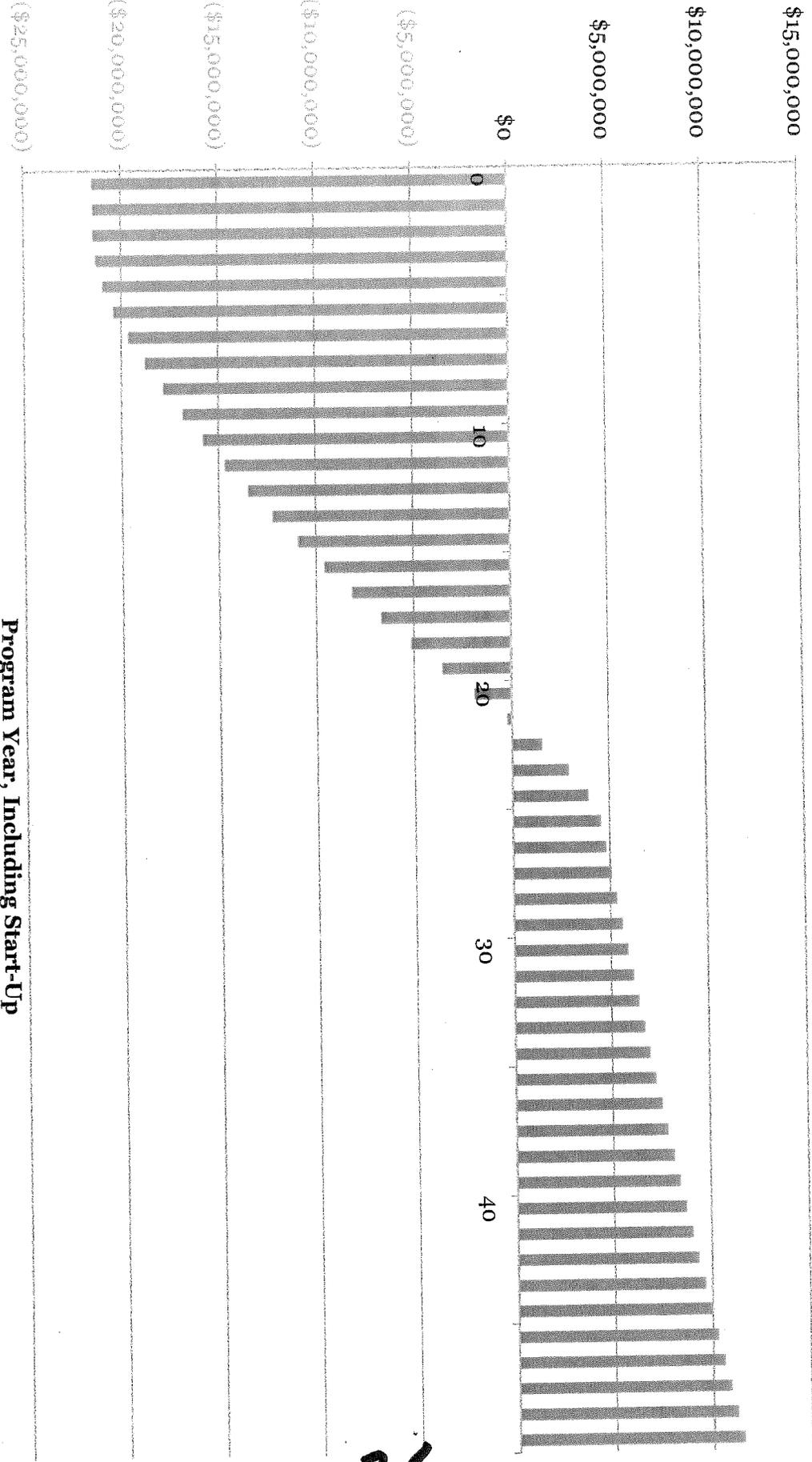
Class Size and

Growth:

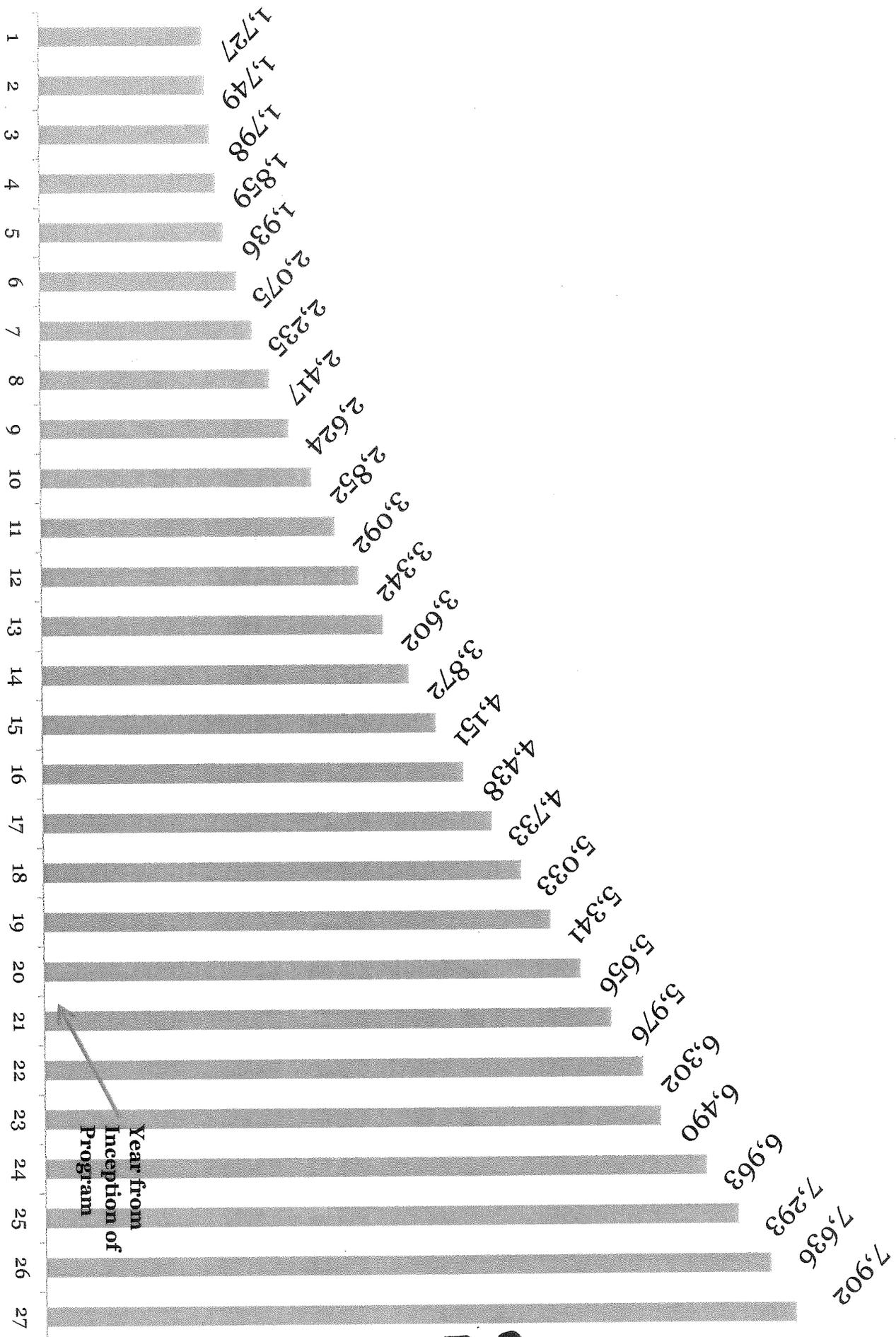
Year 1 Class Size(s):	500
All Classes Yr 1? 0/1	1
Class Growth Rate:	0.00%

25

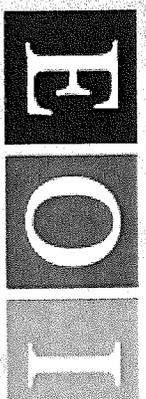
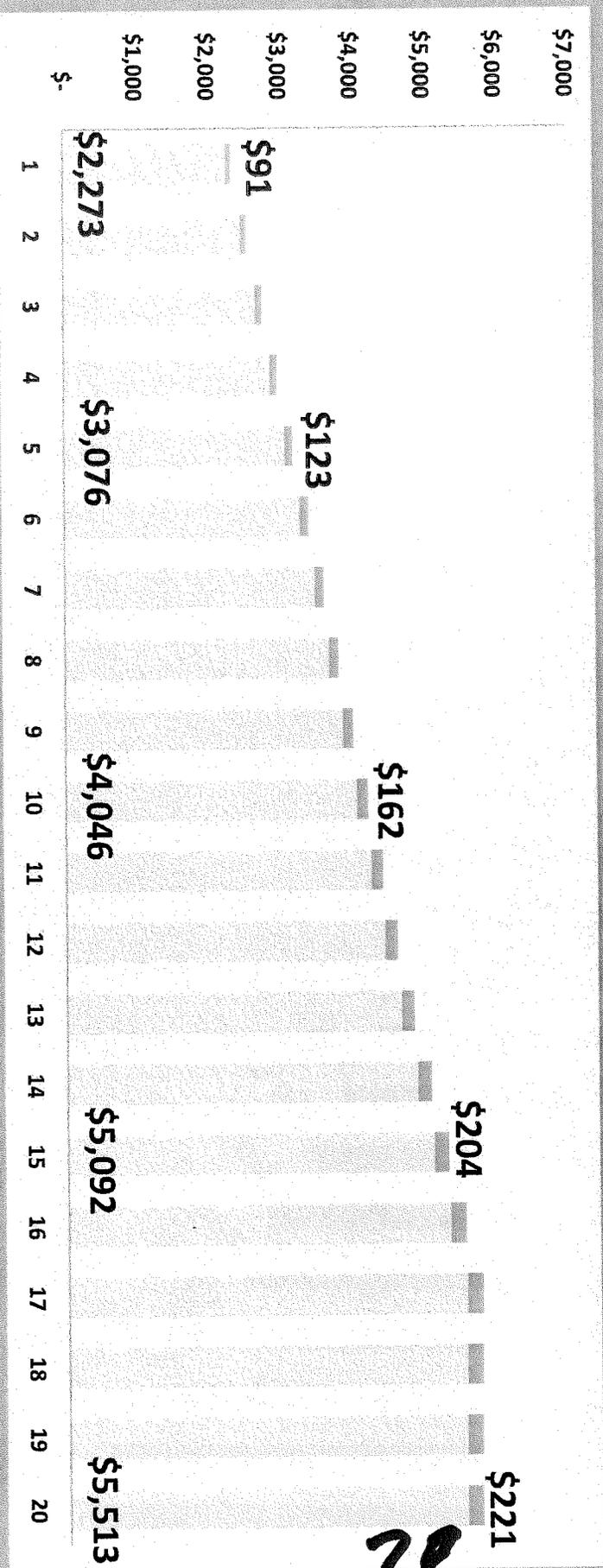
50 Year Cash Flow, 4-Year State University Program, 2013\$



of Students on Green River Promise

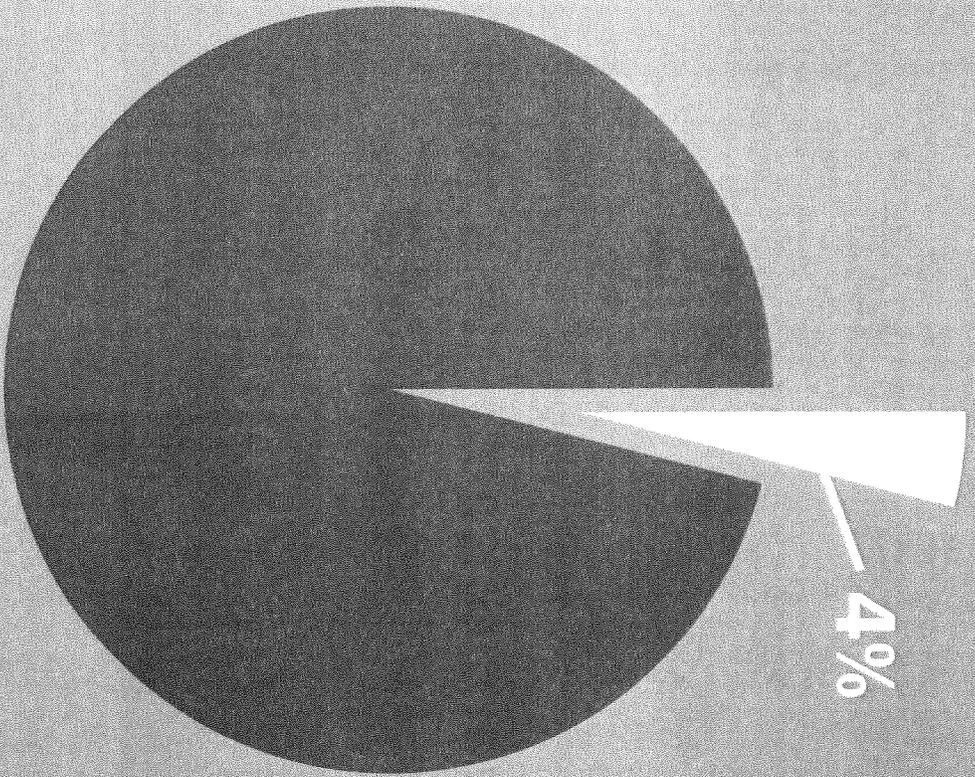


Model contributions: 4-year university



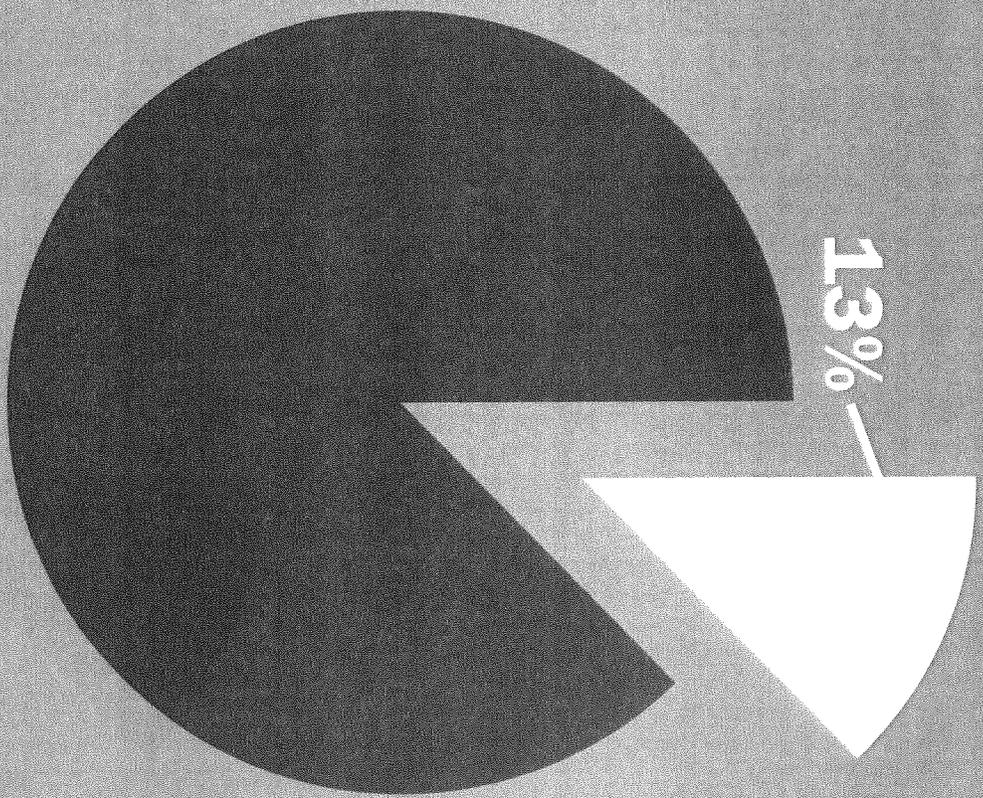
Average PIF Contribution

\$75/month



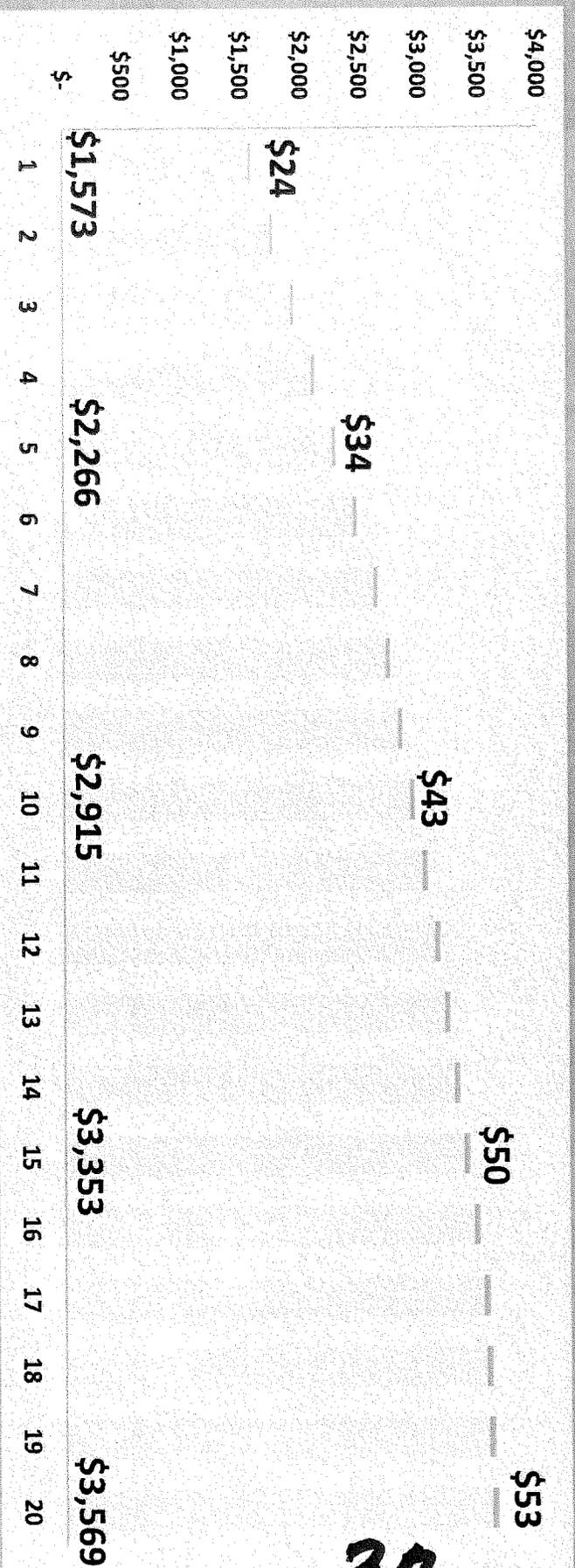
Average Loan Payment

\$240/month



Average monthly salary first year out of college: \$1,880/month

Model contributions: Community college



30

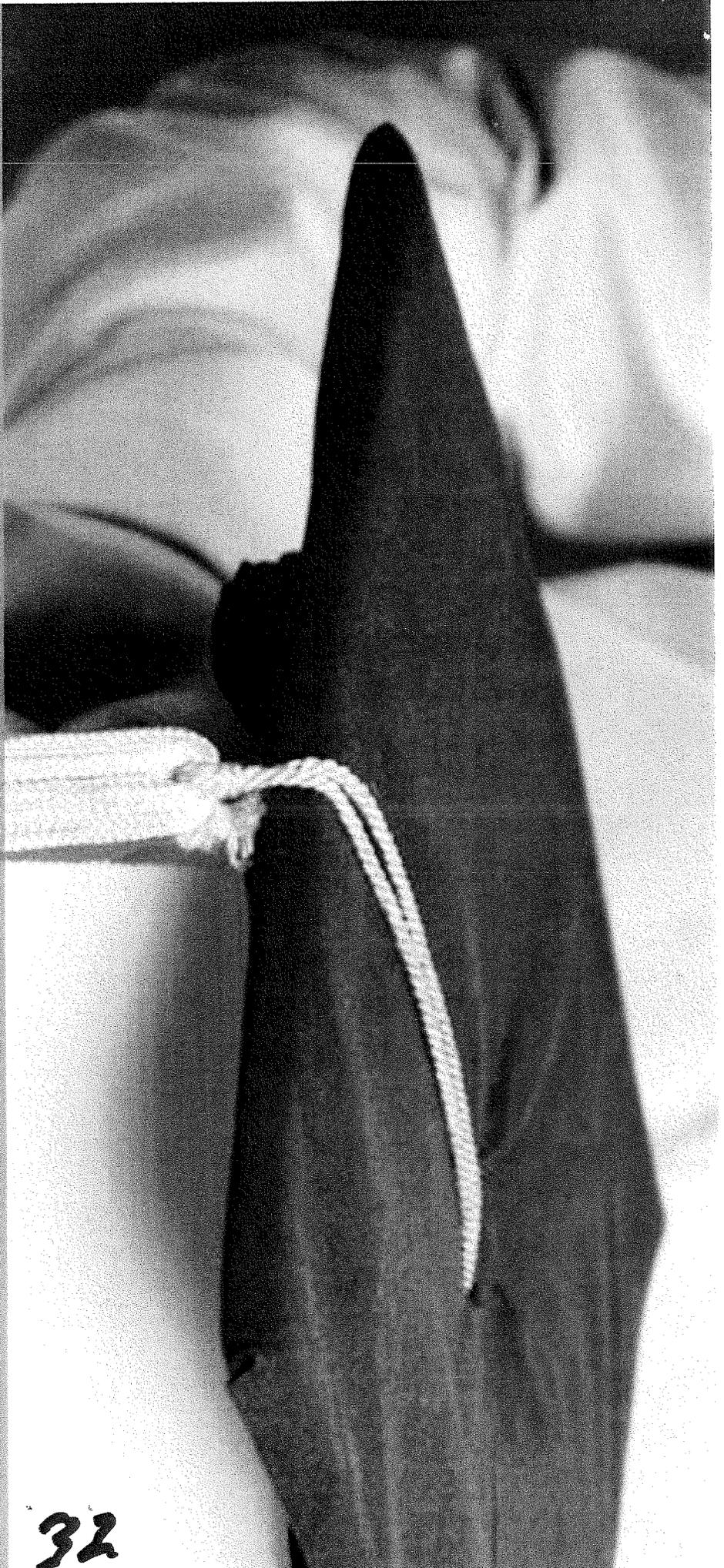


States considering Pay It Forward

California
Connecticut
Florida
Hawaii
Illinois
Indiana
Louisiana
Maine
Maryland
Massachusetts
Michigan
New Jersey

New Mexico
New York
Pennsylvania
Ohio
Oklahoma
Oregon
Rhode Island
South Carolina
Vermont
Virginia
Washington

31



Thank you

Presented by John Burbank
Economic Opportunity Institute

www.eoionline.org

Template to Facilitate Analysis of Affordability Options

Data as of October 7, 2014

Note: all data as submitted by organization

Option	incr \$ finl inv or finl savings	# student impacted 1/3 of	trad'l non-trad'l	Implementation Cost	Funding Source	Time Req'd for Impl	Organiz. Resp. for Implement.	Legis Req'd?	Degrees Attained	impact on private and/or public
hiring 30 College Navigators	\$2.0 M	students	both	\$2.0 M	State	6 months	MCCS	No	50% of the 1/3	Public
Student Work Study	\$2.0 M	312	both	\$2.0 M	State	6 months	MCCS	No	70% Or 218	Public
Summer Scholarships	\$1.6 M	2,000	both	\$1.6 M	State	6 months	MCCS	No	N/A	Public
Create 2 Early College for ME staff positions	\$130,000	65	Traditional	\$130,000	State	?	MCCS	No	?	Public
Increase Early College for ME scholarships from \$1K per year to \$1.5 K per year.	\$212,500	421	Traditional	\$212,500	State	?	MCCS	No	?	Public

Option	Incr \$ finl inv or finl savings	# student impacted	trad'l non-trad'l	Implementation Cost	Funding Source	Time Req'd for Impl	Organiz. Resp. for Implement.	Legis Req'd?	Degrees Attained	and/or public
Increase funding for Maine State Grant Program to reach 10,000 EFC and average award of \$1,500	11.6 million	20000	50/50	Absorb	General Fund	0	FAME	No	all undergrad	Both
Increase funding for Maine State Grant Program to reach 10,000 EFC and allow average award of \$2,500	29 million	20000	50/50	Absorb	General Fund	0	FAME	No	all undergrad	Both
Increase funding for Maine State Grant Program to allow EFC cutoff of 10,000	3.2 million	3600	75/25	Absorb	General Fund	0	FAME	No	all undergrad	Both
Tiered grants of \$250 increments beginning with \$1,000 and reaching 10,000 EFC	7 million	20000	50/50	Absorb	General Fund	0	FAME	No	all undergrad	Both

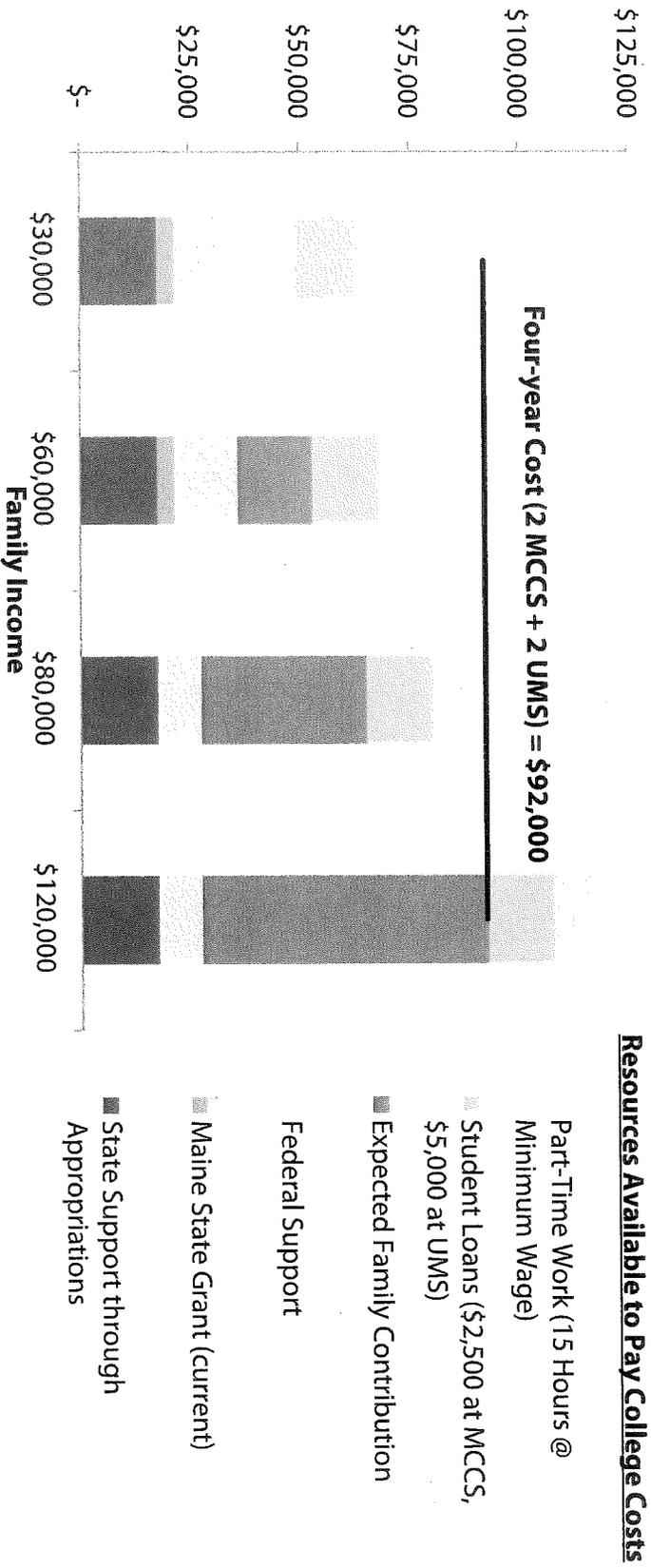
JK

Option	incr \$ finl inv or finl savings	# student impacted	trad'l non-trad'l	Implementation Cost	Funding Source	Time Req'd for Impl	Organiz. Resp. for implement.	Legis Req'd?	Degrees Attained	and/or public
STEM Loan Repayment	1 million	20/yr		50 \$20,000	General Fund or g.o. bond	2 months	FAME	No	N/A	N/A
Hire a First Yr Experience Coordinator	195,000	870	75/25%	62,000		3 months	MMA/Div. Student Affairs	no	n/a	public
Expand College Student Inventory administration	4700	870	75/25	2000		>1 month	MMA/Div. Student Affairs	no	n/a	public
Academic Coach	195,000	870	75/25	62,000		3 months	MMA/Div. Student Affairs	no	n/a	public

55

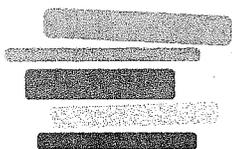
Option	incr \$ finl inv or finl savings	# student impacted	trad'l non-trad'l	Implementation Cost	Funding Source	Time Req'd for Impl	Organiz. Resp. for Implement.	Legis Req'd?	Degrees Attained	and/or public
Fully fund Higher Education budget requests for FY16-17, allowing UMS to freeze tuition for two additional years.	FY16 request for new funding is a 3.4% increase over FY15 baseline, or \$5,989,604. FY17 request	In State residents. For AY 2014, UMS in-state headcount was approximately 30,000.	Both	No implementation costs.	State General Fund	Immediate	UMS Board of Trustees	Yes - budget language		Public

College Affordability Gap Analysis for Maine





Provided by
Dan Williamson



openstax™

History

OpenStax CNX (formerly Connexions) is a non-profit organization founded at Rice University in 1999 by Dr. Richard Baraniuk, Victor E. Cameron professor of engineering. It was one of the first and is now one of the largest open educational resource (OER) libraries in the world. The original OpenStax CNX platform allowed Rice professors to create content and share it with their students. The Hewlett Foundation supported additional infrastructure to expand the platform to more professors at other universities and community colleges. In 2012, OpenStax began publishing complete, peer-reviewed textbooks via the OpenStax CNX platform as part of its OpenStax College project. OpenStax College has published seven textbooks to date and 14 titles are in production. Thanks to a significant grant from the Laura and John Arnold Foundation, OpenStax has also expanded its scope to develop adaptive textbooks for use in K12 classrooms.

Capabilities

OpenStax CNX is a cloud-based virtual library that contains one of the largest collections of OER resources in the world. The contents are under a Creative Commons Attribution License (CC-BY), which allows free use, free adaptations, and the right to redistribute the content. This allows faculty to select text and alter content to local needs for adoption (an adoption occurs when a faculty member assigns a text to students to read for a given course) as well as order print versions. The OpenStax CNX library has over 1,270 books that are made up of more than 21,400 pages that can be mixed, edited, and adapted to create unique texts tailored to individual students, classes, schools, or regions. Content ranges from elementary to graduate level courses. Entire books may be printed at a low cost (\$10-\$35 a book) or PDF versions can be made at no cost.



In 2011, OpenStax CNX partnered with Google to help rebuild and update the platform. Google software developers – supported by funding from Hewlett, Open Society, and Google – have reworked and modernized OpenStax CNX using the Google app engine and responsive design technologies to create a faster, more flexible platform, automatically optimized for tablets and mobile devices. The new platform will make it easier for users to create more content and, especially when combined with the OpenStax College projects, attract additional users.

OpenStax College textbooks can be found within the OpenStax CNX library. The OpenStax College projects are unique in that they are peer-reviewed and professionally developed resources designed to replace expensive publisher materials. The OpenStax College approach is developing a new market ecosystem that provides free online textbooks to students and low-cost supplemental services provided by both for-profit and non-profit organizations to enhance the open content. The OpenStax College titles are produced using an innovative process that substantially decreases development time (upwards of 60 percent) compared to traditional publishers by eliminating the overhead associated with marketing and sales and relying on third-party supplemental service providers.

OpenStax College plans to build a library of 25 open textbooks that will serve the highest enrolled introductory college courses and Advance Placement high school courses. Approximately 16 million students across the United States are enrolled annually in these twenty-five courses at high schools, community colleges, and four-year universities.

Current Footprint

Each month, OpenStax CNX serves upwards of two million individual learners, students, and institutional adopters around the world. Fifty percent of these individuals are from the United States. Two-thirds of OpenStax CNX users in the U.S. are in 10 states: California, Florida, Georgia, Illinois, Massachusetts, New York, Ohio, Pennsylvania and Texas. New York City, Houston, and Chicago alone make up 15 percent of U.S. users.

OpenStax CNX also partners with organizations both domestically and abroad to strengthen its course offerings. The Vietnam Open Educational Resources group has partnered with OpenStax CNX to create and disseminate its national science, technology, engineering and math content for the Vietnamese higher education



system. The Community College Open Textbook Collaborative, which is a partnership of 12 organizations committed to the development and use of open textbooks, has also partnered with OpenStax CNX to develop open content.

OpenStax College's textbooks have been adopted in 875 schools (high school, community college, and four-year universities) across the country. They have been viewed by more than 5 million people on the web and downloaded nearly 1 million times.

Cost Savings

All the content in OpenStax CNX and OpenStax College is free to download and use. For K-12 grade texts, the cost savings associated with using OpenStax CNX materials is largely accrued to the individual schools or school districts, which are expected to provide textbooks to students free of charge. Recently, the South African government chose to use a OpenStax CNX textbook (created by SIYAVULA) to use in their classrooms, printing over three million copies for students and resulting in millions of tax dollars saved.

The impact of free services on students using OpenStax College textbooks is significant. For example, a typical college physics book purchased new in the United States now costs more than \$225. It is estimated that a library of 25 titles capturing ten percent of the U.S. domestic market can save students more than \$150 million dollars annually out of pocket – averaging \$97 in savings per book (when new, used and e-copies are considered). To date, OpenStax College books have saved students nearly \$30 million. Low or no-cost textbooks can also have a positive effect on completion rates for students for whom the cost of high-quality materials is a barrier to graduation.

OpenStax College textbooks are free online, but there are additional services (like homework, online quizzes, etc.) that some courses require. Using OpenStax College partners, these typically cost students about \$27 per course per semester, a fraction of the cost of comparable publisher services. Currently, students are charged about \$5 for an iPad version of an OpenStax textbook. They can print a bound copy of the book for \$30-50, and PDFs can be printed for free.



The Future of the Textbook

In August of 2014, OpenStax received a significant grant from the Laura and John Arnold foundation to scale its research in the area of personalized learning and expand its offerings in the K12 arena. Thanks to the grant, OpenStax is now developing free, digital textbooks designed to deliver personalized lessons to high school students. The project aims to significantly decrease costs for schools and assist teachers by providing actionable analytics that enable them to optimize their students' learning.

Funding History

The OpenStax annual operating budget (exclusive of content development) is approximately \$2 million. Rice University provides facilities and associated costs at no charge as well as administrative and fundraising support. Rice also supports one full-time employee for OpenStax CNX and OpenStax College. Additional support is provided by the William and Flora Hewlett Foundation, Open Society Foundation, Bill & Melinda Gates Foundation, 20 Million Minds Foundation, the Maxfield Foundation, and the Laura & John Arnold Foundation. To date, OpenStax has raised more than \$40 Million.

Several modest fees cover updating and maintenance costs for the projects. Partners that provide services around the OpenStax texts typically return a royalty and or modest mission support fee (\$5-6/student) based on the sales of their goods and services to students. OpenStax also recoups about \$5 per iPad version of the textbook and \$5-6 per bound textbook.

Partners

OpenStax CNX partnered with Google to help build its platform. OpenStax College works with partners to provide services around its OER content and current partners or distributors include Apple, Amazon, Chegg, Courier, CourseLoad, Expert TA, John Wiley and Sons, WebAssign, LearningPod and Sapling Learning.

4/



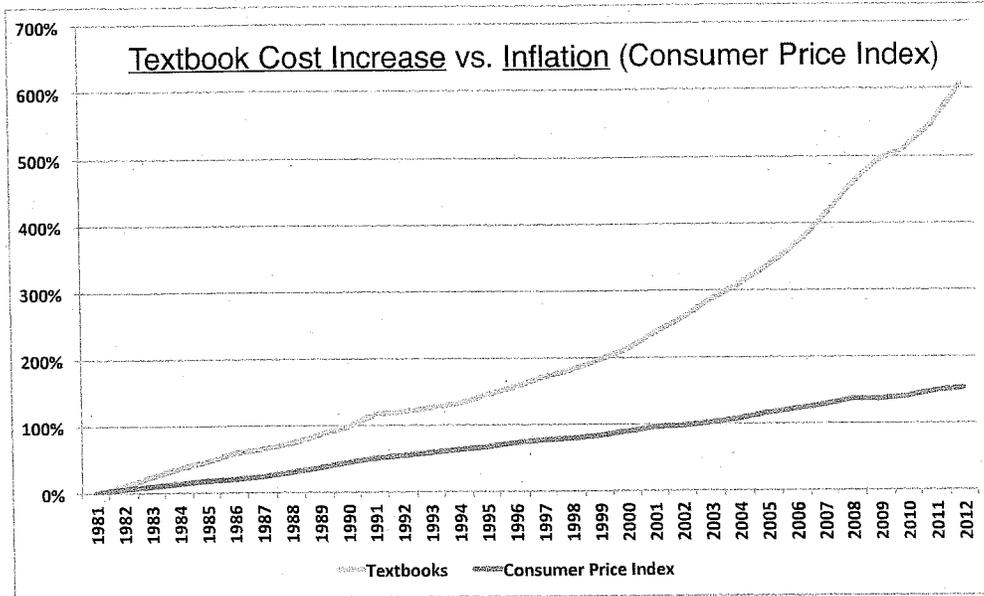
Adoptions in Maine

The following schools have confirmed that they are using at least one OpenStax College textbook.

- University of New England
- University of Maine - Augusta
- University of Southern Maine
- South Portland High School

Annually, these adoptions will save students more than \$22,000.

42



Bureau of Labor Statistics - <http://www.bls.gov/cpi/>

The average student can expect to pay
\$1,200
on textbooks and course materials in
2014-15.

Examples:

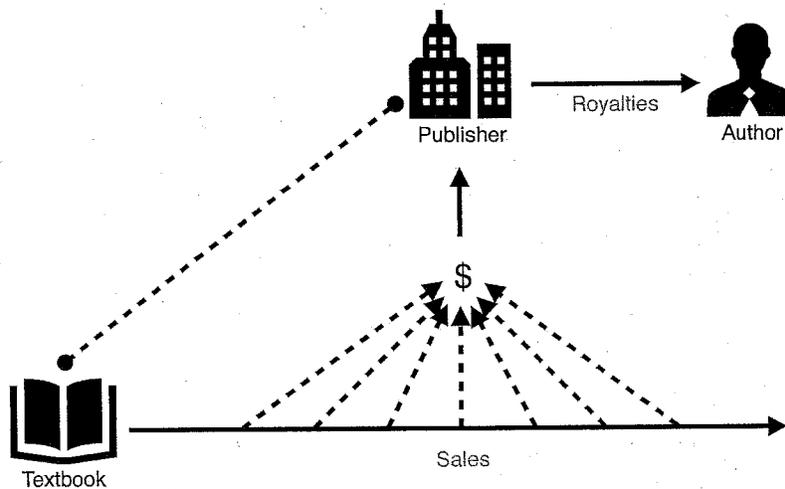
University of Maine	\$1000
University of Southern Maine	\$1346

The College Board - <https://bigfuture.collegeboard.org/pay-for-college/college-costs/quick-guide-college-costs>
University of Maine - <http://umaine.edu/stuaid/costs-at-umaine-2/undergraduatecoa/>
University of Southern Maine - <http://usm.maine.edu/admit/costs-and-financial-aid>

Has the cost of required textbooks caused you to:

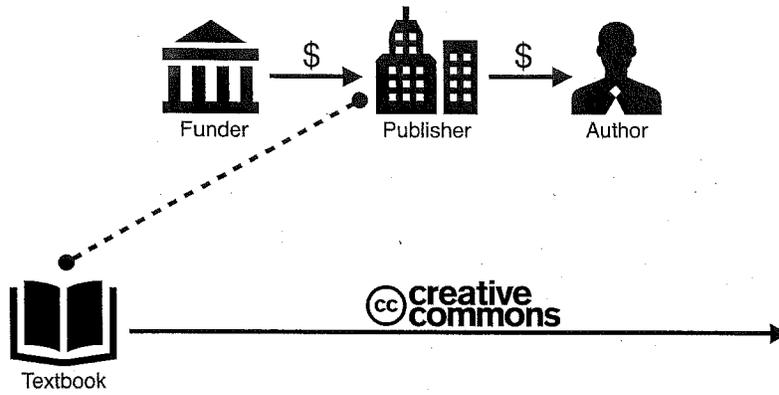
- 63.6% Not purchase the required textbook
- 49.2% Take fewer courses
- 45.1% Not register for a specific course
- 33.9% Earn a poor grade
- 26.7% Drop a course
- 17.0% Fail a course

Florida Student Textbook Survey - http://www.openaccesstextbooks.org/pdf/2012_Florida_Student_Textbook_Survey.pdf



Proprietary Textbooks

4/4



Open Textbooks

With Creative Commons licenses, you are free to...

Copy

Mix

Share

Keep

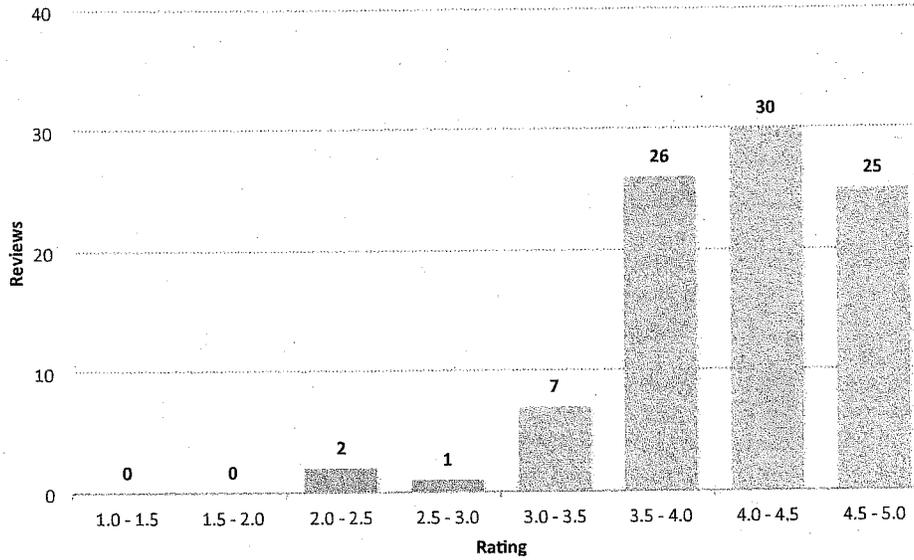
Edit

Use

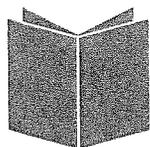


45

Ratings of Open Textbooks



46



Open Education

Provided by
Nicole Allen

What is Open Education?

Open Education is the critical link between teaching, learning, and the collaborative culture of the Internet. SPARC supports policies and practices that advance the creation and use of Open Educational Resources (OERs) — academic materials that everyone can use, adapt, and share freely.

What are Open Educational Resources?

Open Educational Resources (OERs) are teaching, learning, and research resources released under an open license that permits their free use and repurposing by others. OERs can be textbooks, full courses, lesson plans, videos, tests, software, or any other tool, material, or technique that supports access to knowledge.

Why are Open Educational Resources important?

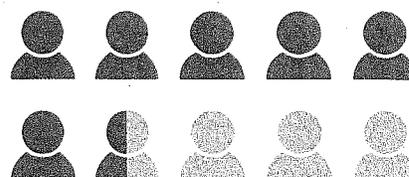
Technology creates an unprecedented opportunity to expand access to knowledge. Yet, our systems for communicating knowledge still have many of the same cost barriers and use limitations present in the pre-Internet, print-based world. This is especially true for educational resources. *The cost of college textbooks has risen rapidly, forcing many students to forgo required materials due to the expense.* Digital alternatives have offered little financial relief, and are typically sold on a subscription basis with heavy restrictions on access. Moreover, traditional publishing systems too often discourage, rather than enable, the adaptation or improvement of content for the classroom.

Educational materials are both an important output of the scholarly research process and, in turn, an essential part of educating tomorrow's scholars. SPARC believes that OERs are the ideal model to leverage the digital environment to unlock the full potential for education.

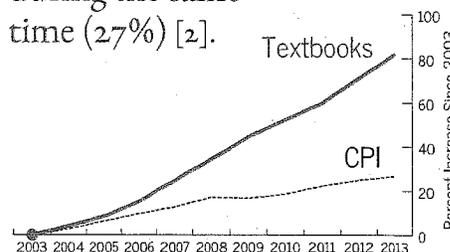
Case studies: What does the data show?

Studies conducted at Virginia State University and Houston Community College found that students who used open textbooks tended to have *higher grades* and *lower withdrawal rates* than their peers who used traditional textbooks [3][4].

65% of students report not purchasing a textbook because of its high price [1].



College textbook prices rose 82% between 2003 and 2013, approximately *triple the rate of inflation* in overall consumer prices (CPI) during the same time (27%) [2].



How Are Open Educational Resources Created?

OER publishing efforts mirror the traditional publishing process, including author compensation and peer review, and release the output under an open license.

OpenCourseWare (OCW) are OERs created by educators and presented in course format, often including both course planning materials and instructional materials.

Publicly-funded initiatives support the development of OER and ensure that taxpayer-funded educational resources are openly licensed.

Individual authors who receive support from their institution or write on their own time can share their work freely through OER repositories.

How Are Open Educational Resources Used?

Students can access OERs online for zero cost, download and keep a digital copy, and print or purchase a low-cost hardcopy.

Educators can curate, tailor, and share OERs to perfectly suit their curriculum, and share their innovations freely.

Authors can disseminate their work to a worldwide audience while still receiving attribution.

Institutions can leverage OERs to reduce student out-of-pocket costs.

Entrepreneurs can build businesses around OER by offering value-added products.

How Can You Support Open Education?

SPARC supports the creation and adoption of OERs to be used in teaching, along with collaborative new approaches to learning, where knowledge is created and shaped openly, and promotes practices and policies that advance this vision. You can help support OERs by:

Increasing OER awareness and adoption. Students, professors, librarians, and administrators can help raise awareness, increase discoverability, and advocate adoption of OERs whenever appropriate.

Supporting OER development. Institutions, foundations, authors, and researchers can support or participate in frameworks for creating, vetting, and evaluating the efficacy of OERs.

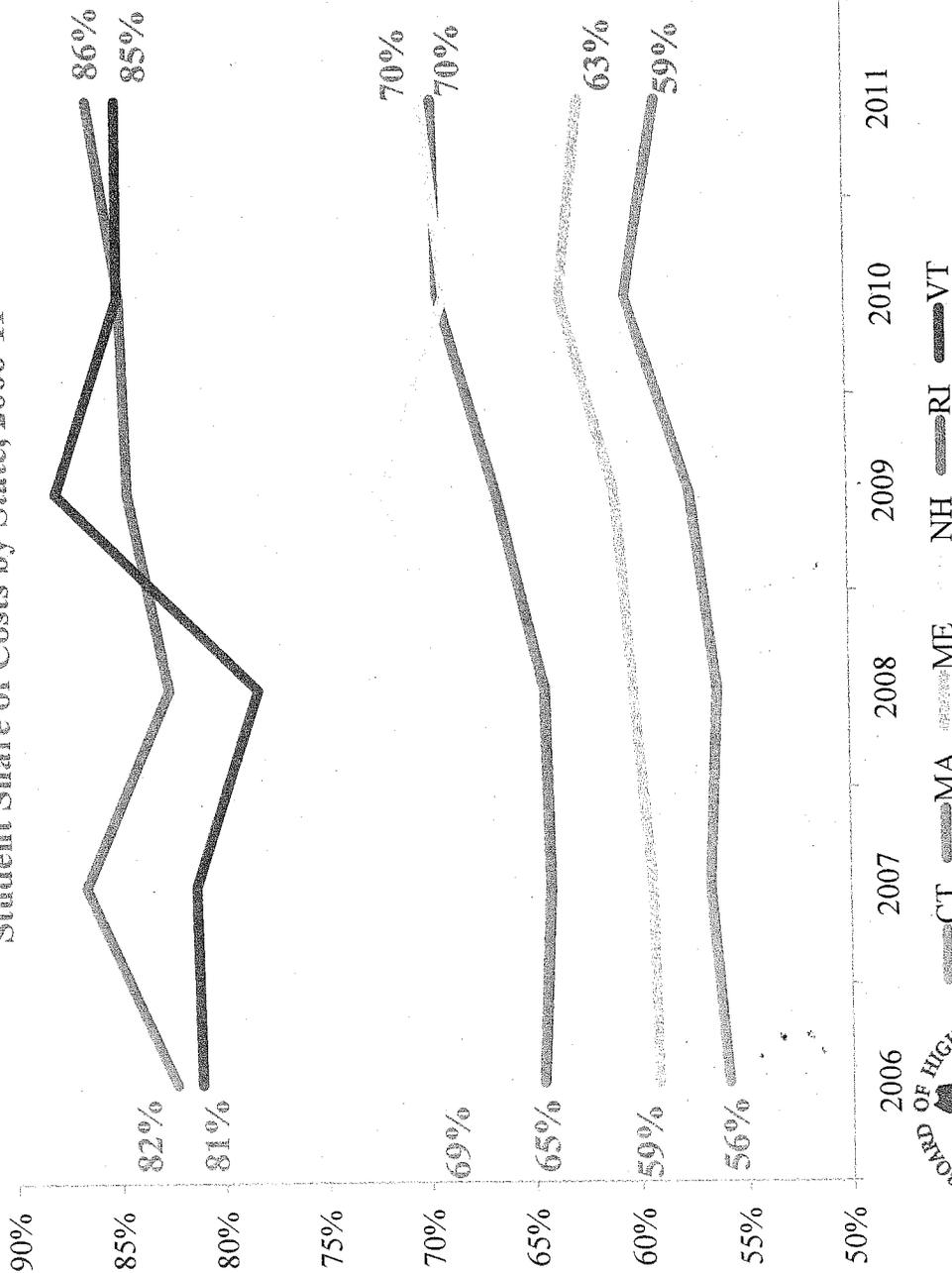
Advocating effective policies. Policymakers can fund programs that support OER creation and adoption, ensure that publicly-funded educational resources are openly licensed, and remove policy barriers that hinder OER.

-
- [1] U.S. PIRG Education Fund and the Student PIRGs. 2014. Fixing the Broken Textbook Market. <http://www.studentpirgs.org/reports/sp/fixing-broken-textbook-market>
 - [2] Bureau of Labor Statistics. 2014. Consumer Price Index Databases. <http://www.bls.gov/cpi/data.htm>
 - [3] Hilton III, J., & Laman, C. 2012. One college's use of an open psychology textbook. *Open Learning: The Journal of Open, Distance and e-Learning*, 27(3), 265-272.
 - [4] Feldstein, A., Martin, M., Hudson, A., Warren, K., Hilton III, J., & Wiley, D. 2012. Open Textbooks and Increased Student Access and Outcomes. *European Journal of Open, Distance and E-Learning*.



Cost burden shifting to students

Student Share of Costs by State, 2006-11

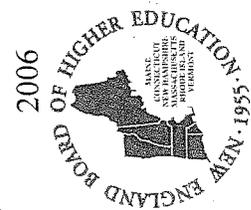


Mean Student Share of Cost, 2011

State	2-year public	4-year public	4-year private nonprofit
CT	34%	47%	86%
MA	51%	57%	79%
ME	31%	57%	92%
NH	52%	81%	72%
RI	52%	81%	93%
VT	85%	74%	89%

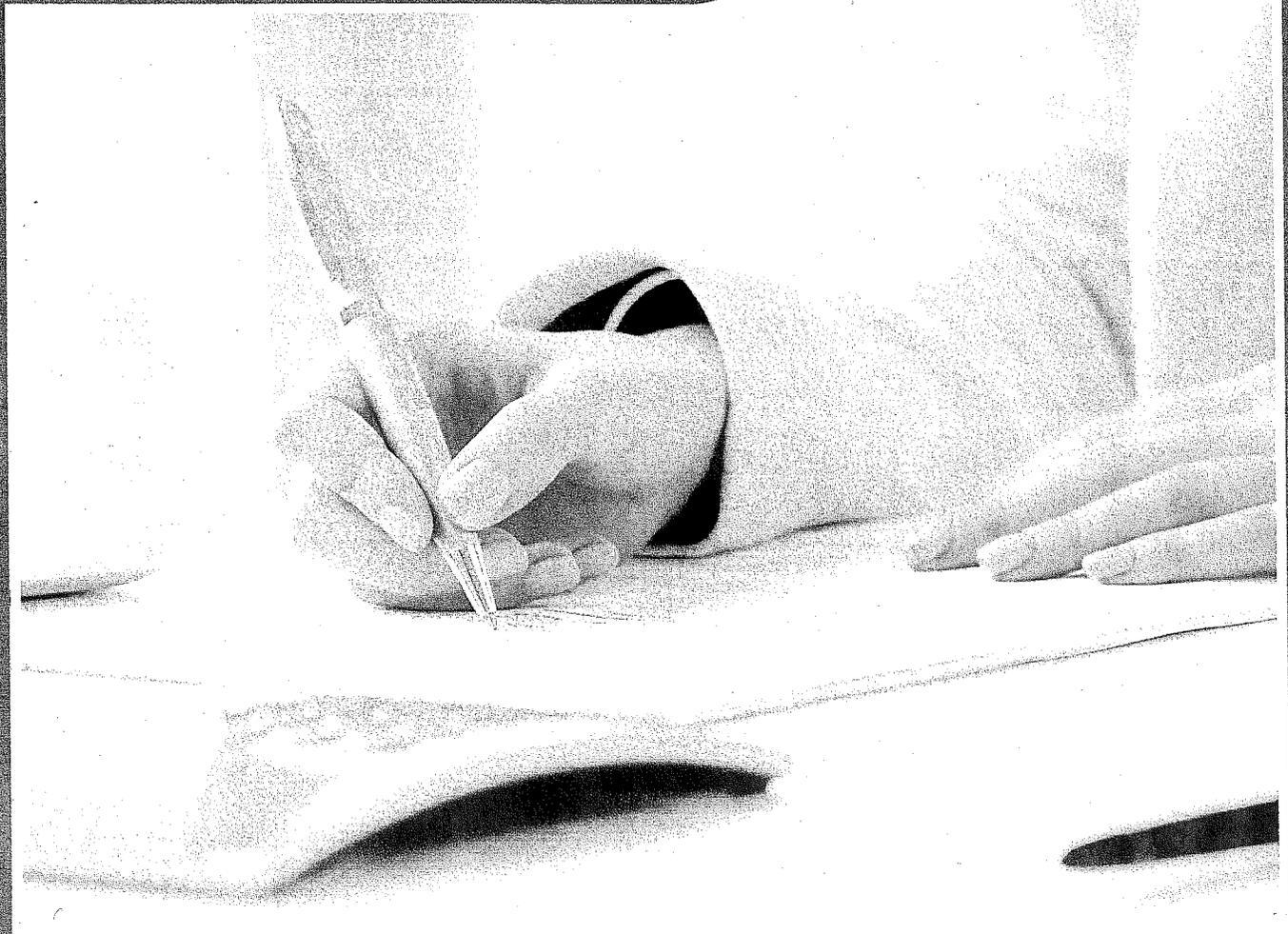
Note: Averages include 2-year public, 4-year public, and 4-year private nonprofit institutions. Student share of costs are net tuition revenue as a share of education and related spending. Dollar values were adjusted for inflation (CPI).

Source: Delta Cost Project



Workforce Development Initiatives: Collaborating to Prepare for the Jobs of the Future

A REPORT BY THE NCSL FOUNDATION PARTNERSHIP
ON JOBS AND INNOVATION





ACKNOWLEDGEMENTS

In 2012, the National Conference of State Legislatures (NCSL) formed a new public/private partnership to examine the role of state policymakers in job creation and innovation through the NCSL Foundation. The partnership supports NCSL's ongoing efforts to improve the quality of information available to state policymakers.

A key goal of the partnership is to improve the dialogue among state legislators, business representatives and other organizations interested in state policy decisions. The partnership convened a National Jobs Summit to bring state policymakers together with the private sector partners in September, 2013 and is publishing of a series of issue briefs on state policies related to job creation and innovation.

This brief is one of three.

Other briefs in this series include:

*The State Role in Rebuilding the Manufacturing Sector
Innovations in State Entrepreneurship Policy*

These works could not have been accomplished without the invaluable assistance and expertise of our partners.

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have 6 million low skilled, likely unemployed, workers.³ This brief highlights various state and industry-led workforce development initiatives. All approach workforce development in different ways and target various populations. They range from aligning K-12 and post-secondary education to workforce needs, to alternative ways of delivering basic skills, to re-training the underemployed and unemployed, to training specific skills for specific industries. All the initiatives, however, are models of collaboration among several state agencies and business partners to develop workers with the skills needed to continue to grow businesses and state economies.

Re-Envisioning Systems of Education, Basic Skills and Workforce Training

Washington I-BEST⁴

In 2005, Washington's State Board for Community and Technical Colleges (SBCTC) found that only 4 percent to 6 percent of adult students in basic skills classes ultimately went on to enroll in college-level courses. Additionally, it found a "tipping point" where students who completed one year of college-level courses and earned a degree or certificate markedly increased their earnings within five-years, compared to other adult basic education students. In response to these findings, SBCTC created the Integrated Basic Education and Skills Training (I-BEST) program to increase the rate of students reaching this tipping point and advancing to college-level courses and completing a postsecondary credential.

I-BEST moves students quickly through the basic skills courses by combining them with college-level technical education courses, allowing students to immediately start earning credits toward a credential. Programs are designed with a specific sequence of courses, leading directly to a degree or certificate in high-demand jobs. When developing I-BEST programs, local labor market needs were analyzed along with potential wages for students who complete the programs. Eighty-eight percent of all I-BEST programs are in the fields of health care, education, manufacturing and business currently. There are more than 150 programs throughout Washington's 34 community and technical colleges.

Basic skills instructors and technical education faculty develop and teach I-BEST courses, collaboratively and are required to be in class together at least 50 percent of the instructional time. In this way courses combine traditional basic skills with college level concepts, allowing students to apply their learning to the professional/technical education immediately. For example, an I-BEST course in business technology integrates basic skills and professional education by having students create a busi-

ness portfolio. Basic writing skills and word processing skills are integrated to write a proposal, and basic math skills and spreadsheet skills are integrated to develop a budget.

Approximately 3,000 students a year enroll in I-BEST programs, and a large portion are undereducated and from the low-skill workforce. Sixty-two percent are female, 41 percent are students of color, and 21 percent speak English as a second language. Additionally, almost half the students (47 percent) have at least one child.

A cohort of I-BEST students was evaluated over four years to determine progress toward meeting the program's goal of taking students to the "tipping point." Twenty-four percent of students completed one year of college level courses and earned a credential, while 12 percent made no progress. Compared to traditional basic skills students, I-BEST students were three times more likely to earn college credits and nine times more likely to complete a credential. I-BEST students also reported an average of \$2,300 more in earnings annually.

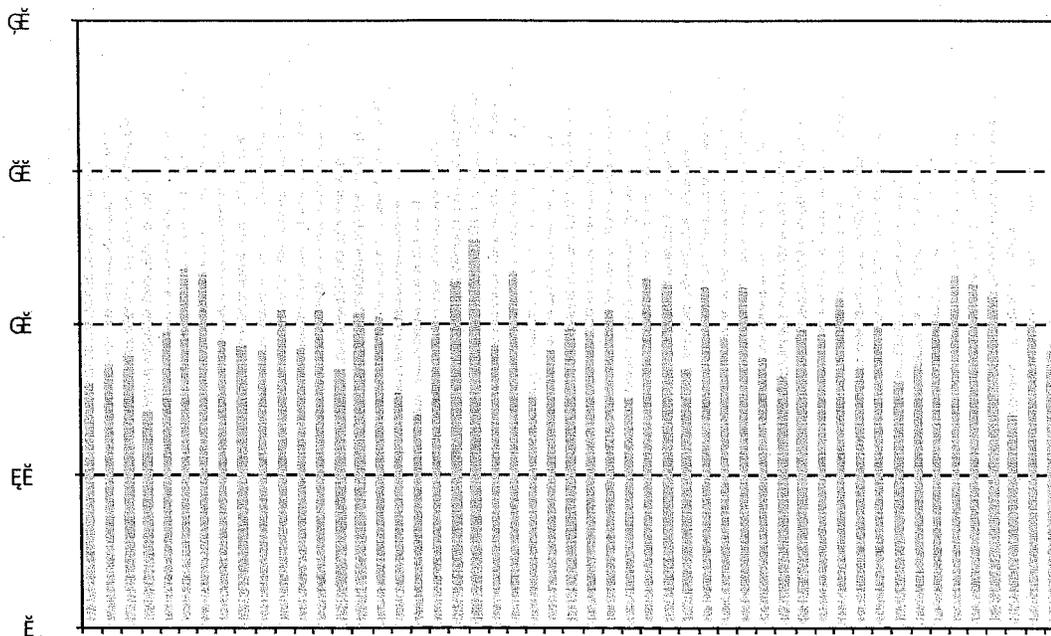
The I-BEST program has become a nationally recognized success for aligning basic skills education with workforce needs. Through support from private foundations, SBCTC has provided technical assistance to several other states looking into developing similar programs.

Michigan No Worker Left Behind⁵

The major economic downturn in Michigan during the recession left hundreds of thousands of workers unemployed, with many losing long-held, well-paying jobs. Research by the Michigan Commission on Higher Education and Economic Growth concluded that the state's future competitiveness required doubling the number of workers with a postsecondary degree or credential to keep pace with a labor market that now required different skills. In 2007, Governor Jennifer Granholm announced the *No Worker Left Behind* (NWLB) initiative with the goal of reaching 100,000 participants within three years. With the support from federal Workforce Investment Act funds, the program provides low-wage, underemployed and unemployed workers with \$5,000 a year, for up to two years, to pay for tuition, fees and other educational expenses at community colleges or other educational institutions.

A key aspect of NWLB is that the skills and credentials being funded align with business demands. More than 40 Michigan Skills Alliances helped build a strong industry partnership around the state, relaying the needs of employers. The program changed Michigan's workforce development strategy by focusing resources on helping workers obtain new skills and credentials matching workforce need. It helped move the state away from short-term job search and placement services, to-

PERCENT WORKING AGE POPULATION (25-64) WITH ASSOCIATES DEGREE OR HIGHER IN 2011⁶ AND PERCENT OF JOBS REQUIRING POSTSECONDARY EDUCATION BY 2020 (CERTIFICATE OR ABOVE)⁷



2020 Jobs Requiring a Degree
2011 Adults with Degrees

ward longer-term investment in training and obtaining credentials. In 2009, Michigan’s Department of Energy, Labor and Economic Growth reported that 75 percent of those who had completed the program had retained or obtained a job. And by 2010, the three year mark, the program had enrolled 148,808 participants, outpacing the state’s goals.

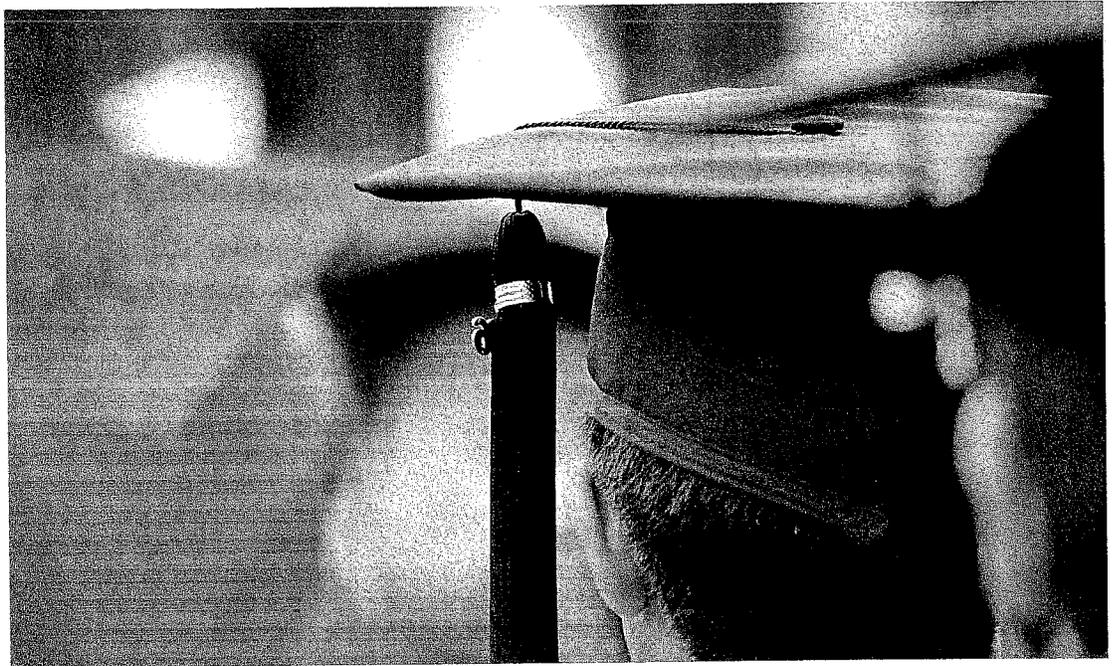
Oregon Career Pathways Initiative⁸

Launched in 2004 with five colleges, and now expanded to all 17 community colleges in the state, the Oregon Career Pathways Initiative seeks to increase the number of Oregonians with certificates or associate’s degrees and equip them with the skills to fill the middle-skill job demand in the state. The program also aims to ease the transition between high school and community college and encourage further educational attainment, whether through higher degrees or stackable certificates. This is part of the state’s larger 40-40-20 Goal, which states that 40 percent of the workforce will have four-year degrees or higher, 40 percent will have a postsecondary certificate or associate’s degree, and 20 percent will hold a high school diploma or equivalent and be ready to enter the workforce by 2025. The initiative is focused on ensuring

that all Oregonians have access to and complete short-term certificate programs that can lead to either higher levels of degrees or immediate employment in occupations such as healthcare, manufacturing and business.

The Oregon State Board of Education, in 2007, approved Career Pathway Certificates of Completion (CPCC) which are short-term certificates that contain courses linked to competencies that qualify students for an entry-level job. Since then, more than 240 CPCCs have been developed through collaboration between employers and colleges. The programs are flexible and “student-centered,” allowing students to enter the program at several points, depending on their skill level. Between 2008 and 2012, more than 5,000 of these short-term certificates were awarded. More recently, the state-developed Career Pathway Roadmaps website has been launched with more than 350 “roadmaps” or plans for students seeking educational goals and career attainment. These roadmaps include all the courses needed, as well as certificates and associate’s degrees offered at the state’s community colleges, to pursue specific fields.

Industry Leaders Training Future Workers



Toyota Advanced Manufacturing Technician Program⁹

With the shift toward a global manufacturing market along with a large group of technically skilled workers retiring, North America Toyota began to evaluate how to recruit new workers and what skills they would need to keep Toyota competitive worldwide. Toyota officials quickly found the problem of having to replace a “retirement bubble” of workers was compounded by the fact that the next generation of workers needed a more comprehensive set of skills than those of the retiring worker.

Toyota identified three main problems: 1) a lack of highly skilled applicants; 2) a lack of basic education skills; and 3) a negative perception of manufacturing. There were not enough sufficiently skilled workers in the pool Toyota could draw from. In fact, the No. 1 unfilled job opening during the Great Recession was for “skilled technicians.” From the numerous applicants Toyota received, only 5 percent were qualified. This was largely because applicants had a single skill – electrician, mechanic, welder or a programmer. What Toyota needed was a next generation, multi-skilled worker who had the knowledge to perform a combination of all these jobs.

Toyota leaders decided that to remain competitive they could not wait for large, systemic change within the education system. They needed to be the catalyst for change. So, they re-imagined their next generation team member into someone with many skills (electrical, mechanics, fabricator); strong math and reading capabilities; aptitude for fast technical learning; a proficiency with digital media; strong problem solving skills; effective

Low Skill Jobs

- Require high school diploma or less

Middle Skill Jobs

- Require some college, certificate or associates degree

High Skills Jobs

- Require bachelor’s degree and higher

verbal and written communications; good interpersonal skills; and the ability to be a team worker.

With this vision of the next generation skilled technician, Toyota then created a path to get these workers trained. The result was the Advanced Manufacturing Technician Program. It combines classroom instruction with on-site training at a local Toyota manufacturing facility, resulting in an associate’s degree in applied science upon completion. Each program is held in a partner community college near a Toyota or other appropriate partner manufacturing facility.

Students receive paid work experience along with an intensive high-tech curriculum, general education skills, and instruction in workplace culture and behavior. The program runs for five semesters, with students in class or work for 40 hours a week, allowing them to complete it within 18 months. Students work two to three days a week, and earn between \$17 and \$19 an hour, or as

much as \$30,000 a year to cover education expenses. The hands-on experience allows students to better immediately integrate their classroom learning.

The remaining days are spent in the classroom where students receive general education and technical classes such as motor mechanics and welding. Technical classes are held in spaces similar to places these students will work in upon completion. The realistic look and feel of a factory keeps Toyota from having to provide “re-training” students, as they have to for those graduating from traditional community college programs.

There are Advanced Manufacturing Technician Programs in Kentucky, West Virginia, Indiana, Mississippi and Texas, and all of them except Kentucky are in the process of recruiting students to begin in the fall of 2013. Kentucky’s program began in 2010, partnering with Bluegrass Community and Technical College, and has graduated three classes to date. Other companies have joined with Toyota to provide manufacturing training, including 3M, Central Wheel Manufacturing and GR Spring.

Students who have completed the program have all passed the Toyota technical written exam. Additionally, average test results have been above passing in all four technical areas, compared to candidates coming into Toyota without the AMT Program. They typically pass only one or two areas. The result thus far has been the

multi-skilled technicians Toyota envisioned.

*Pennsylvania Industry Partnership*¹⁰

In 2006, lawmakers in Pennsylvania passed legislation allocating \$20 million in state revenue and \$10 million in state-designated federal Workforce Investment Act resources to develop partnerships of employers from a single regional industry to identify common skill gaps. The partnerships were then charged with developing curricula and credentials needed for designated occupations at local community colleges and WIA-funded training providers. Called “Industry Partnerships,” there are now about 80 with 6,300 businesses receiving funding not only from the state but from employer investments as well. By the end of 2009, nearly 100,000 participants had been trained through the Industry Partnership and participants were experiencing up to a 6.6 percent wage gain after completion of the program.

The partnerships publicize particular clusters of industries with good wages and benefits, or that have the greatest potential for economic growth or challenges to growth or retention. These areas include manufacturing, bio-medical, business and financial services, and healthcare and bio-medical, among other fields. The partnerships develop training and education programs for workers and assist in placing dislocated workers in open jobs with other employers within the partnerships.

Endnotes

- 1 Anthony Carnevale, *Recovery: Projections of Jobs and Education Requirements Through 2020* (Washington, D.C.: The Georgetown University Center of Education and the Workforce, 2013).
- 2 Carnevale, 2013.
- 3 James Manyika, Susan Lund, Byron August, & Sreenivas Ramas, *Help Wanted: The Future of Work in Advanced Economies* (n.p.: McKinsey Global Institute).
- 4 John Wachen, Davis Jenkins, and Michelle Van Noy, *How I-BEST Works: Findings from a Field Study of Washington State’s Integrated Basic Education and Skills Training Program* (New York, NY: Community College Research Center, 2010).
- 5 Larry Good, *Michigan’s No Worker Left Behind: Lessons Learned from Big-Picture Workforce Policy Change* (Washington, D.C.: National Skills Coalition, 2011).
- 6 Lumina Foundation, *A Stronger Nation Through Higher Education* (Indianapolis: Lumina Foundation, 2012).
- 7 Carnevale, 2013.
- 8 *Community Colleges and Workforce Development, Worksource Oregon, Pathways in Oregon: A Descriptive Study of the Statewide Initiative & Initial Cohort of Completers.* (March 2013)
- 9 *Toyota Advanced Manufacturing Technician Development Program information accessed from correspondence with Dennis Dio Parker, Assistant Manager, North American Production Support Center, College Partner & Advanced Manufacturing Technician Development Programs*
- 10 *Pennsylvania Workforce Development, Industry Partnerships in Pennsylvania, accessed from: <http://www.portal.state.pa.us/portal/server.pt?open=514&objID=575072&mode=2>*

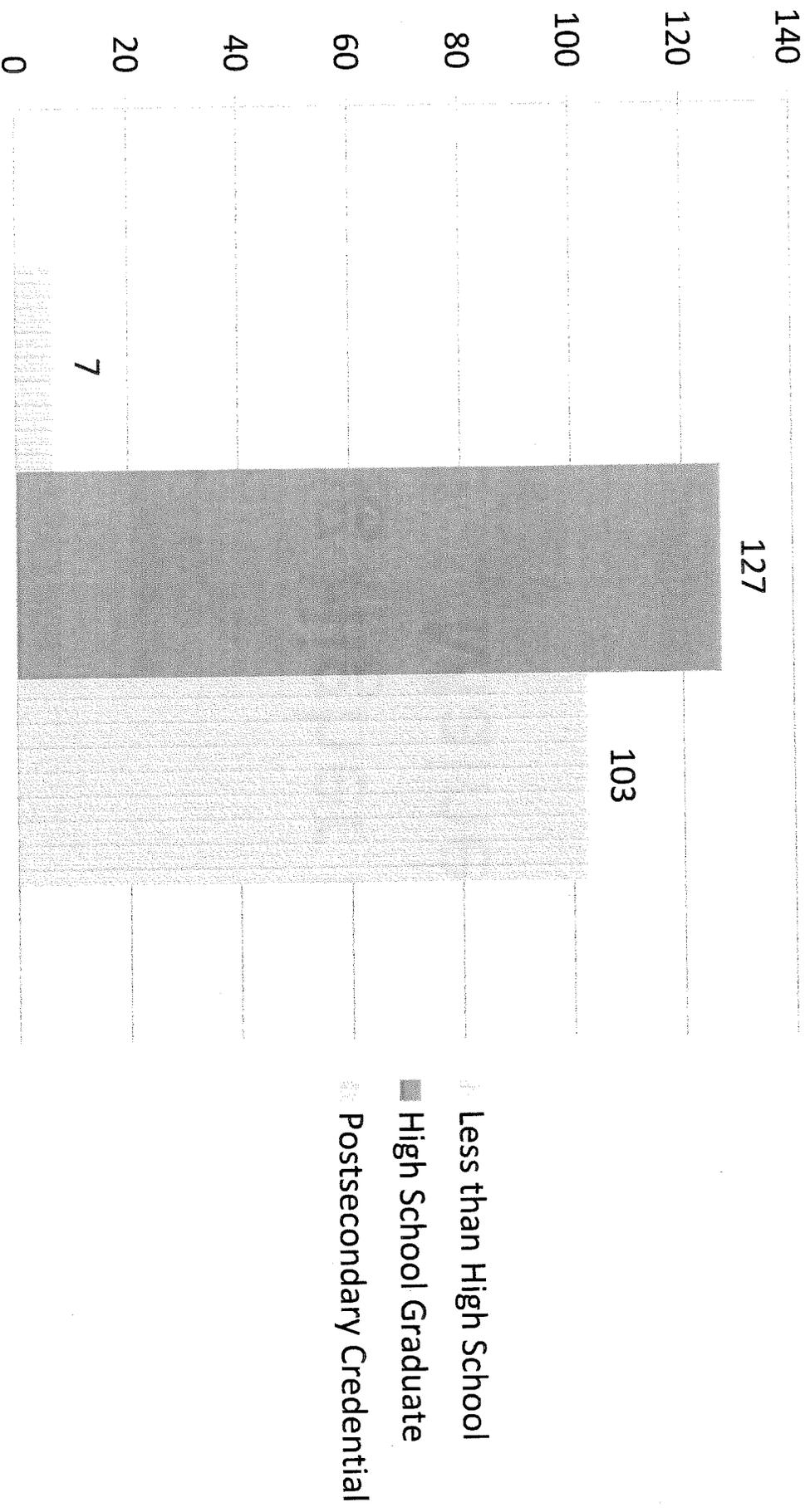
Advancing Higher Education in Maine

Prepared by

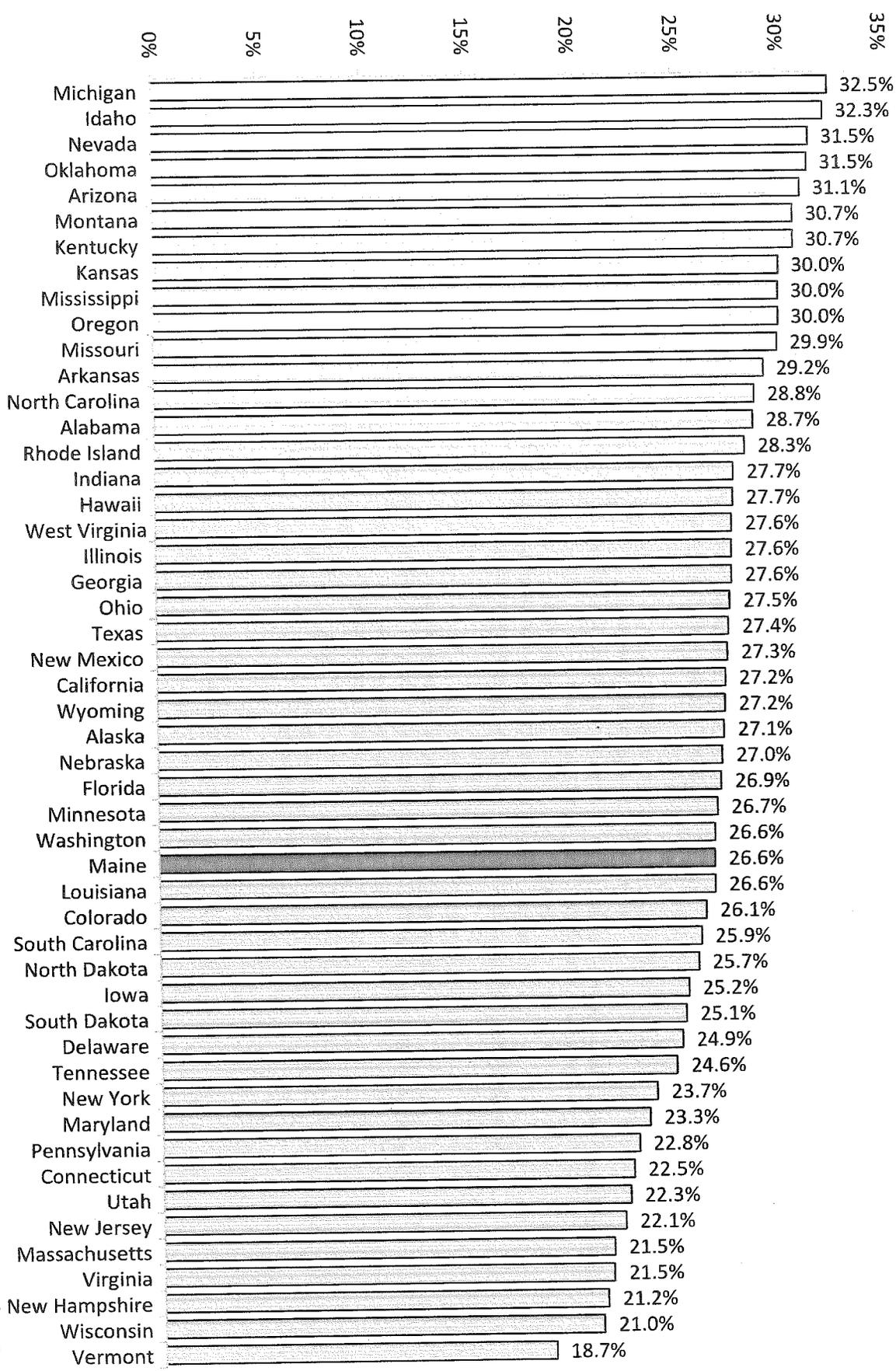
*The National Conference of State Legislatures (NCSL)
The National Center for Higher Education Management
Systems*

September 2014

Projected Job Growth From 2010 to 2020 by Education Level, Maine (in thousands)

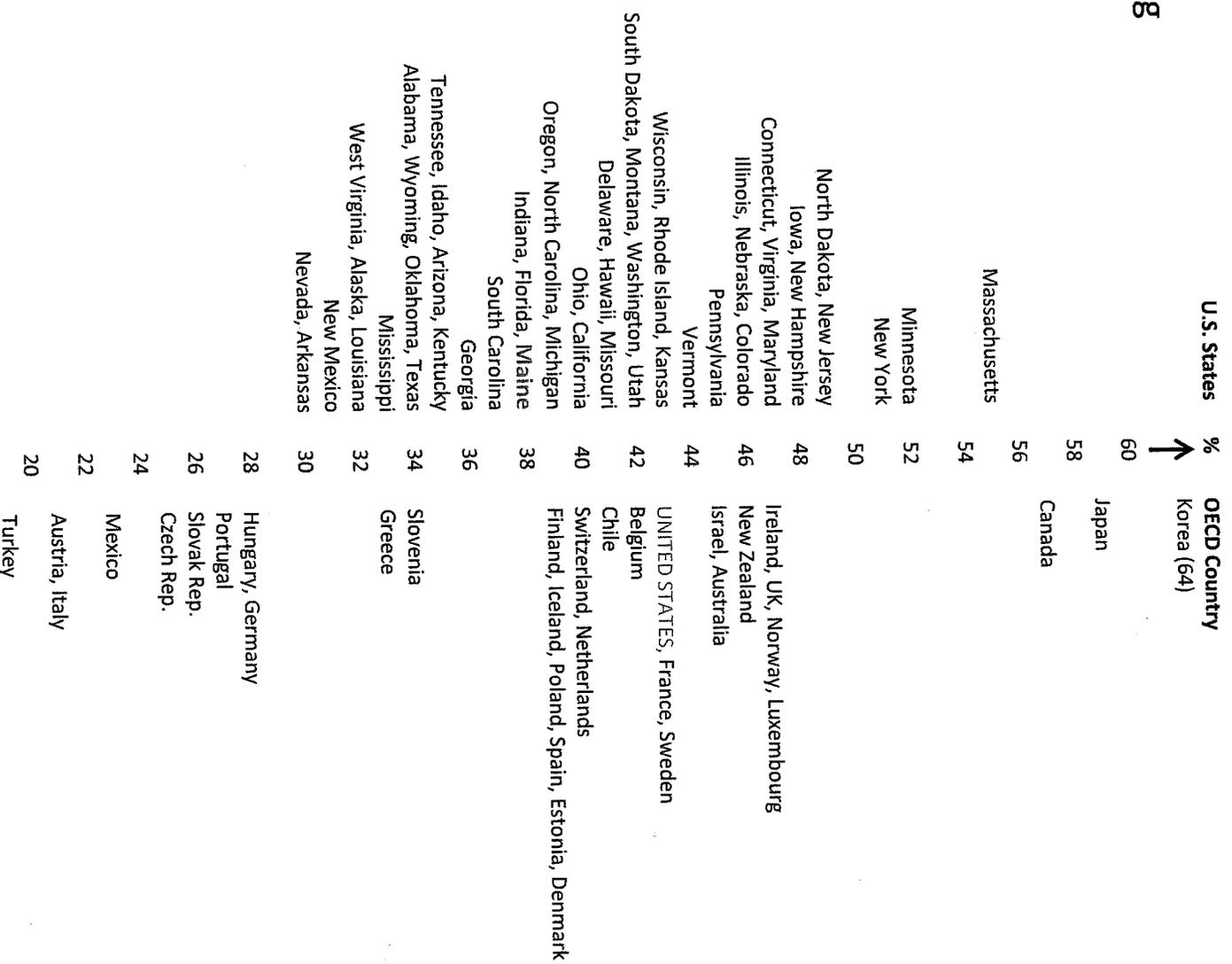


Gap Between Percent of Jobs in 2020 That Will Require a College Education and the Percent of Adults, Aged 25-64 with Associates and Higher in 2012



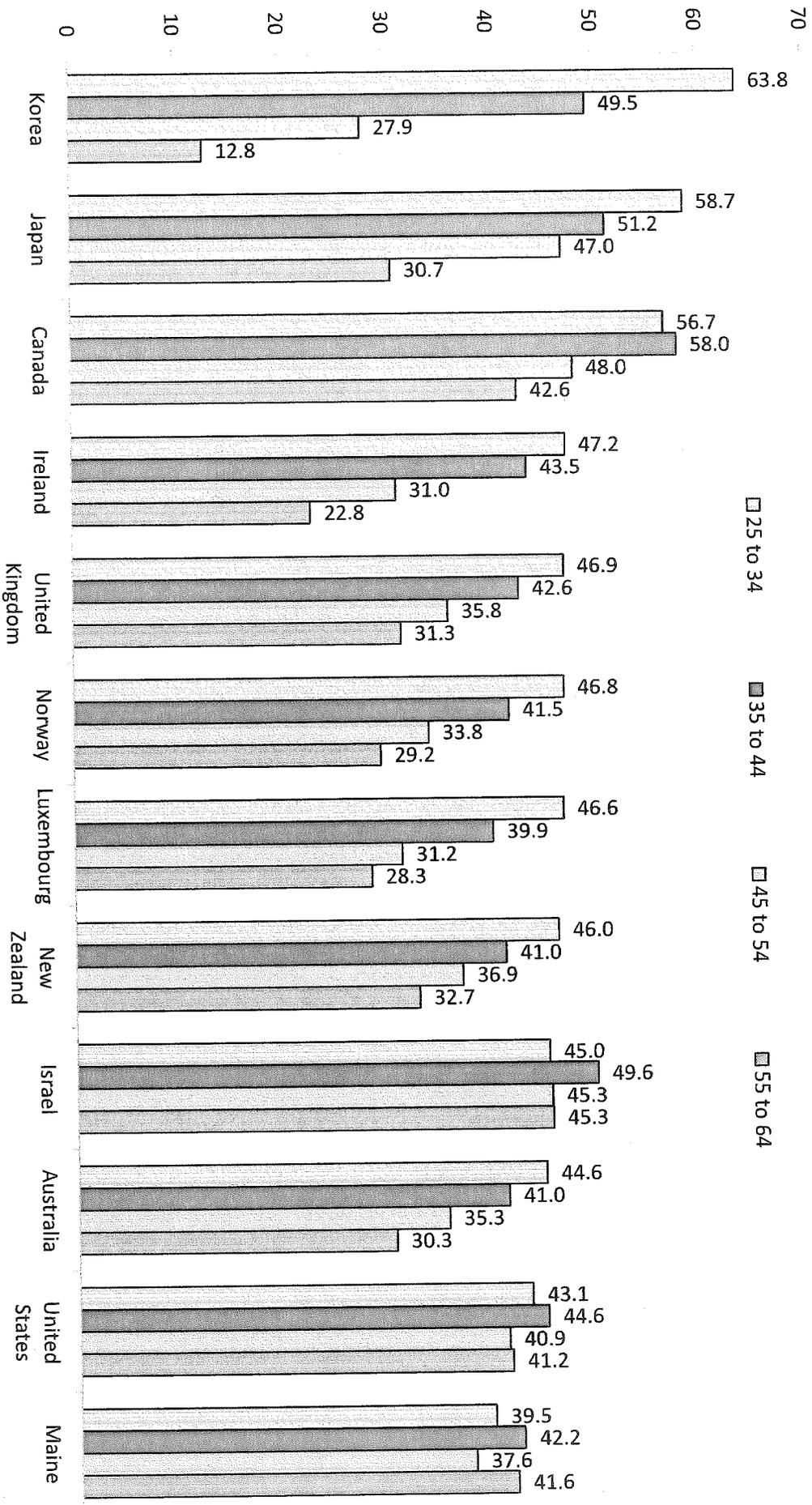
Sources: U.S. Census Bureau, 2012 American Community Survey One-Year Public Use Microdata Sample; Georgetown Public Policy Institute, Recovery Job Growth and Education Requirements through 2020.

Comparing Maine with Nations and Other States in the Percentage of Young Adult Degree Attainment (Ages 25-34)



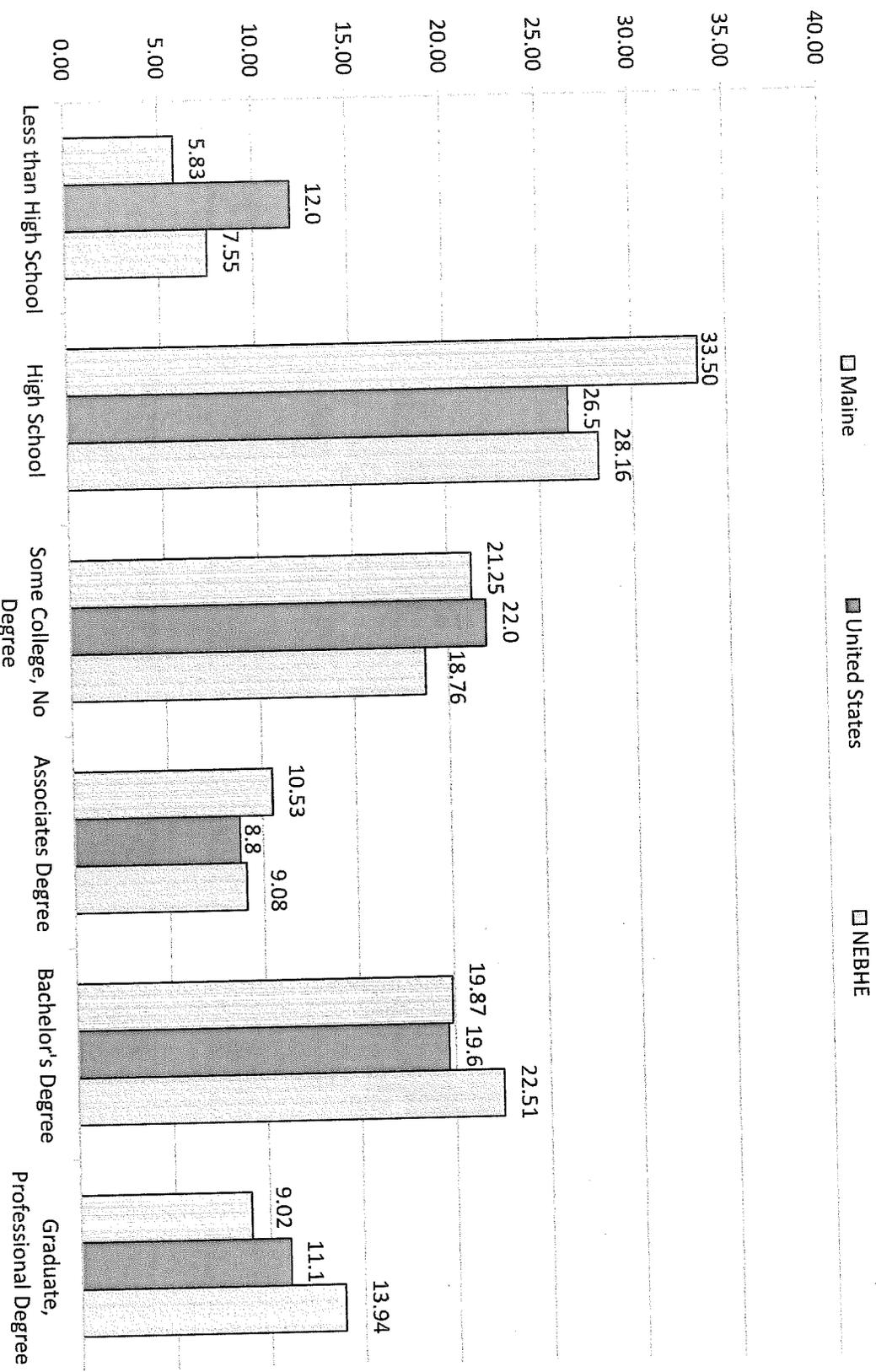
Source: 2013 OECD Education at a Glance (for year 2011); 2012 American Community Survey

Percent of Adults with an Associate Degree or Higher by Age Group – Maine, U.S. & Leading OECD Countries



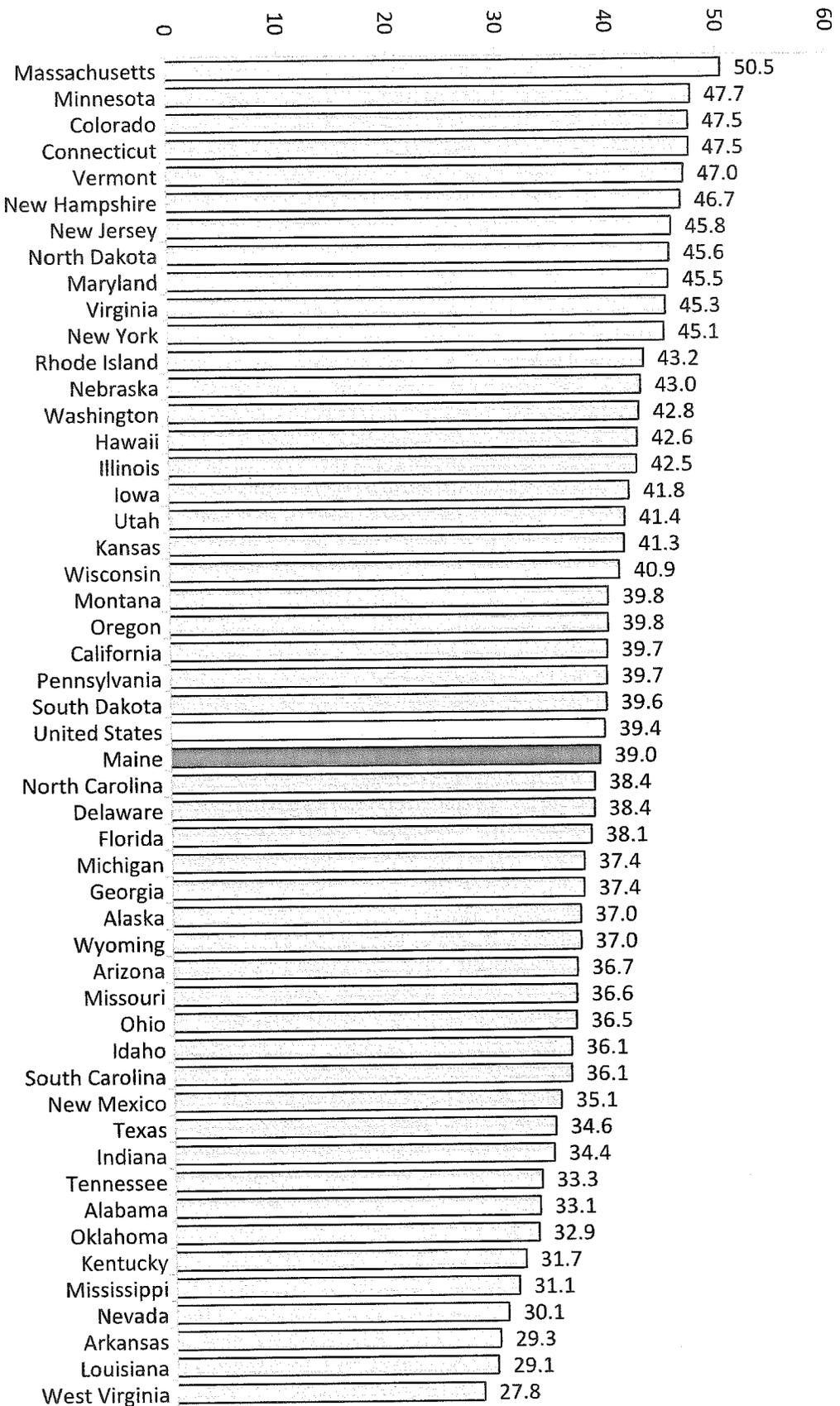
Source: OECD, Education at a Glance 2013 (for 2011); U.S. Census Bureau, 2012 American Community Survey One-Year Public Use Microdata Sample File

Educational Attainment of Working Aged Adults, Ages 25-64 – Maine, U.S., and NEBHE Average, 2012



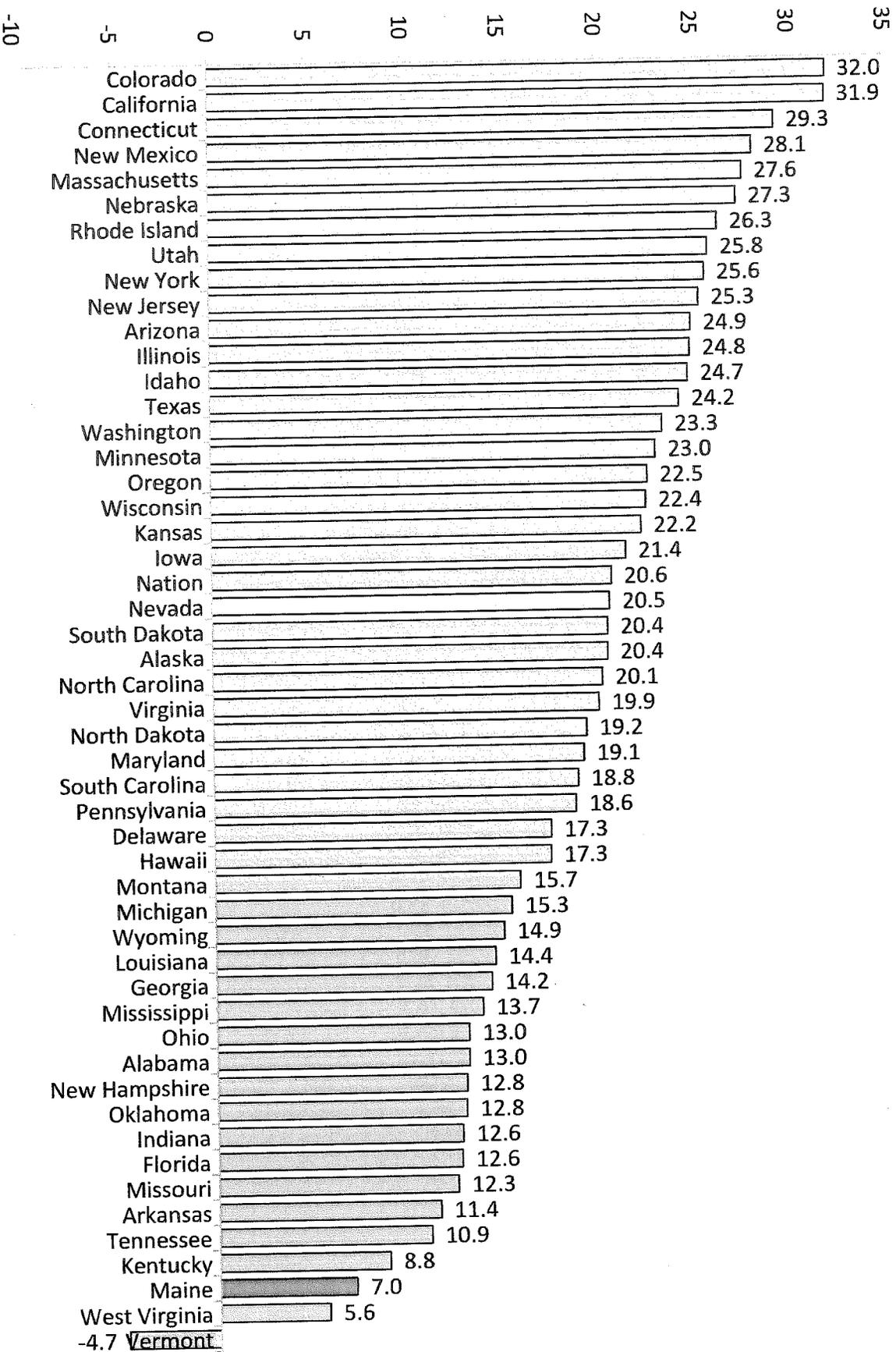
Source: U.S. Census Bureau, 2012 American Community Survey One-Year Public Use Microdata Sample.

Percent of 25-64 Year Olds with College Degrees – Associate and Higher, 2012

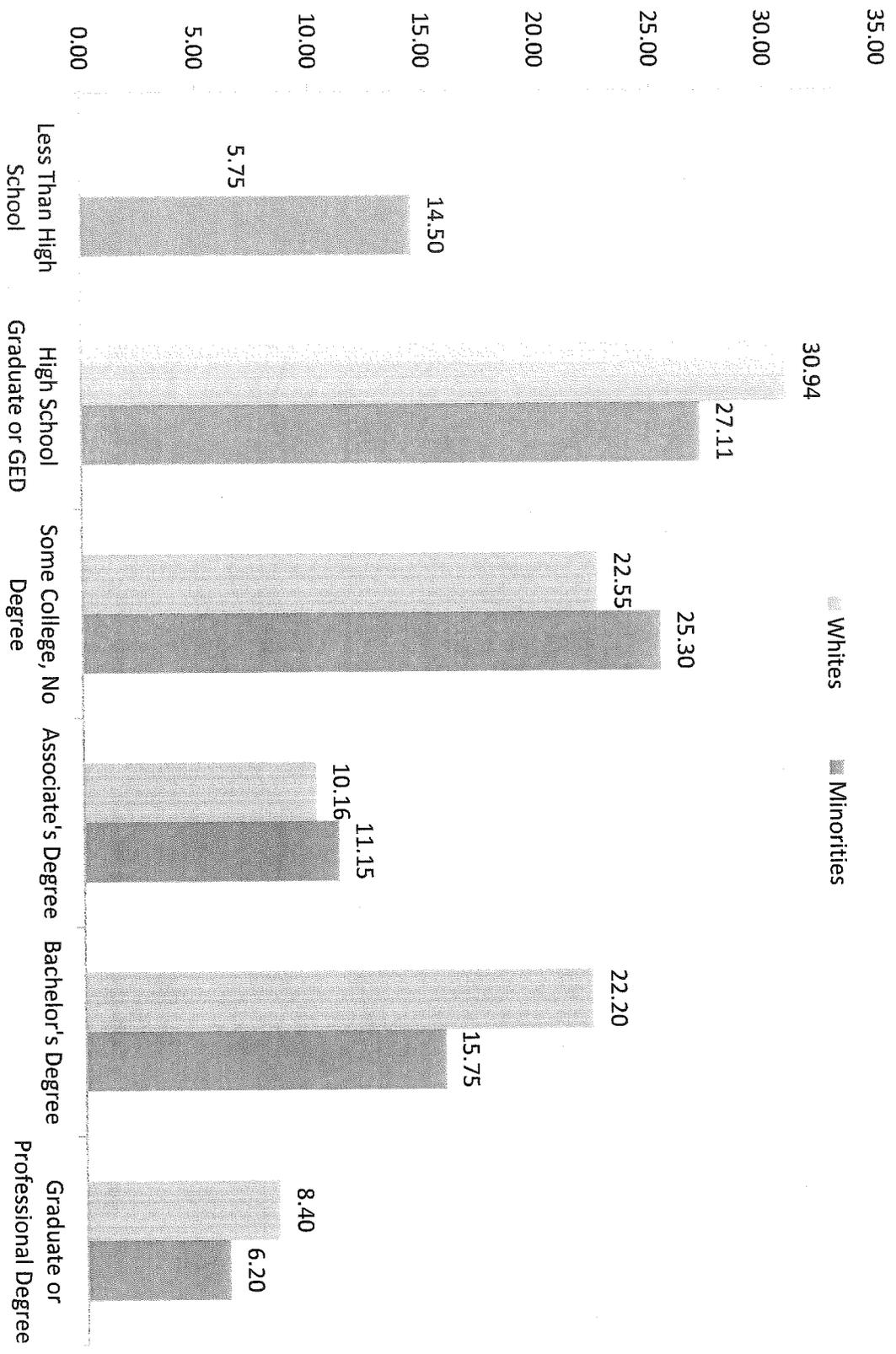


Source: U.S. Census Bureau, 2012 American Community Survey

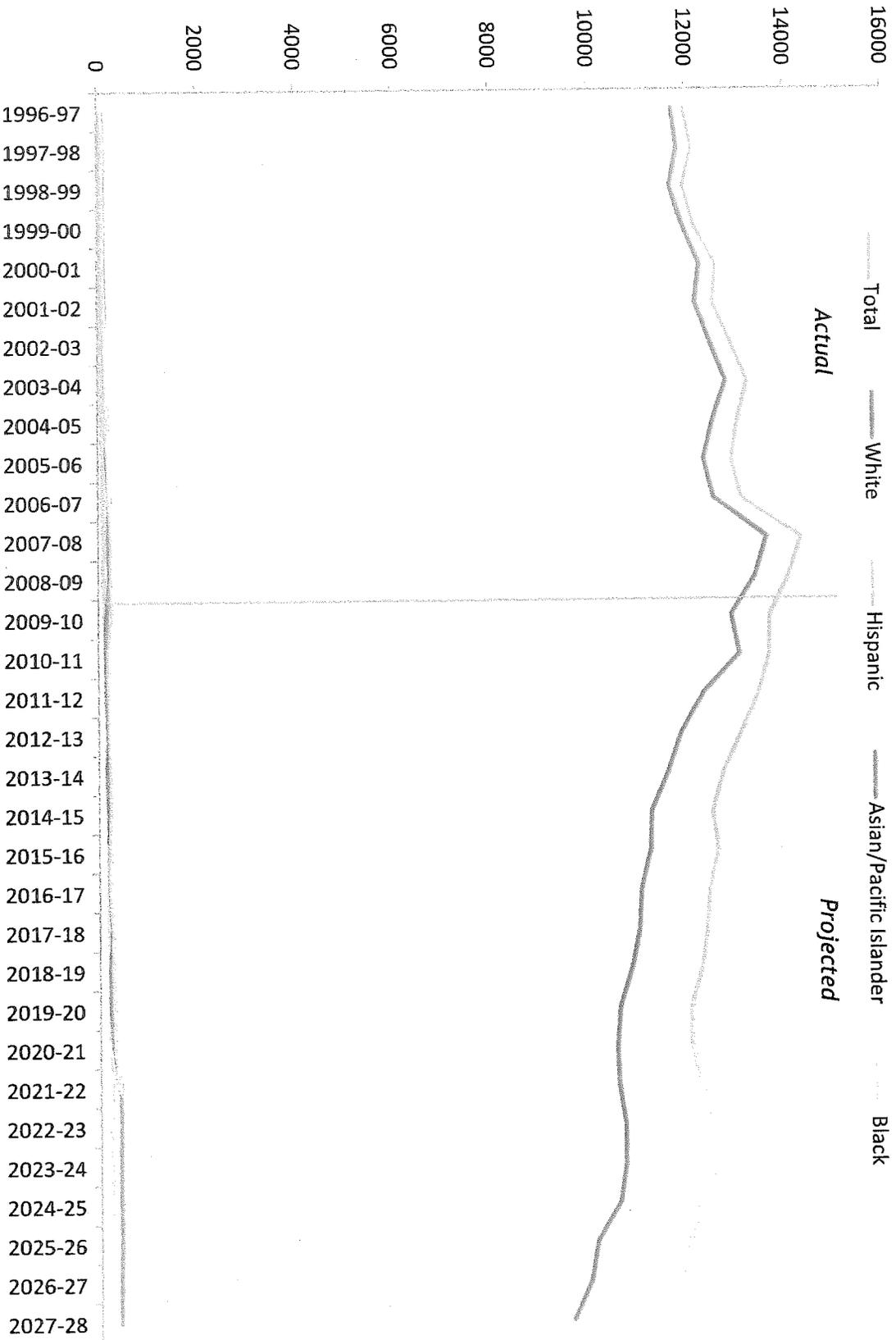
Difference in College Attainment Between Whites and Minorities, Ages 25-64 (Blacks, Hispanics, Native Americans) (2010-12)



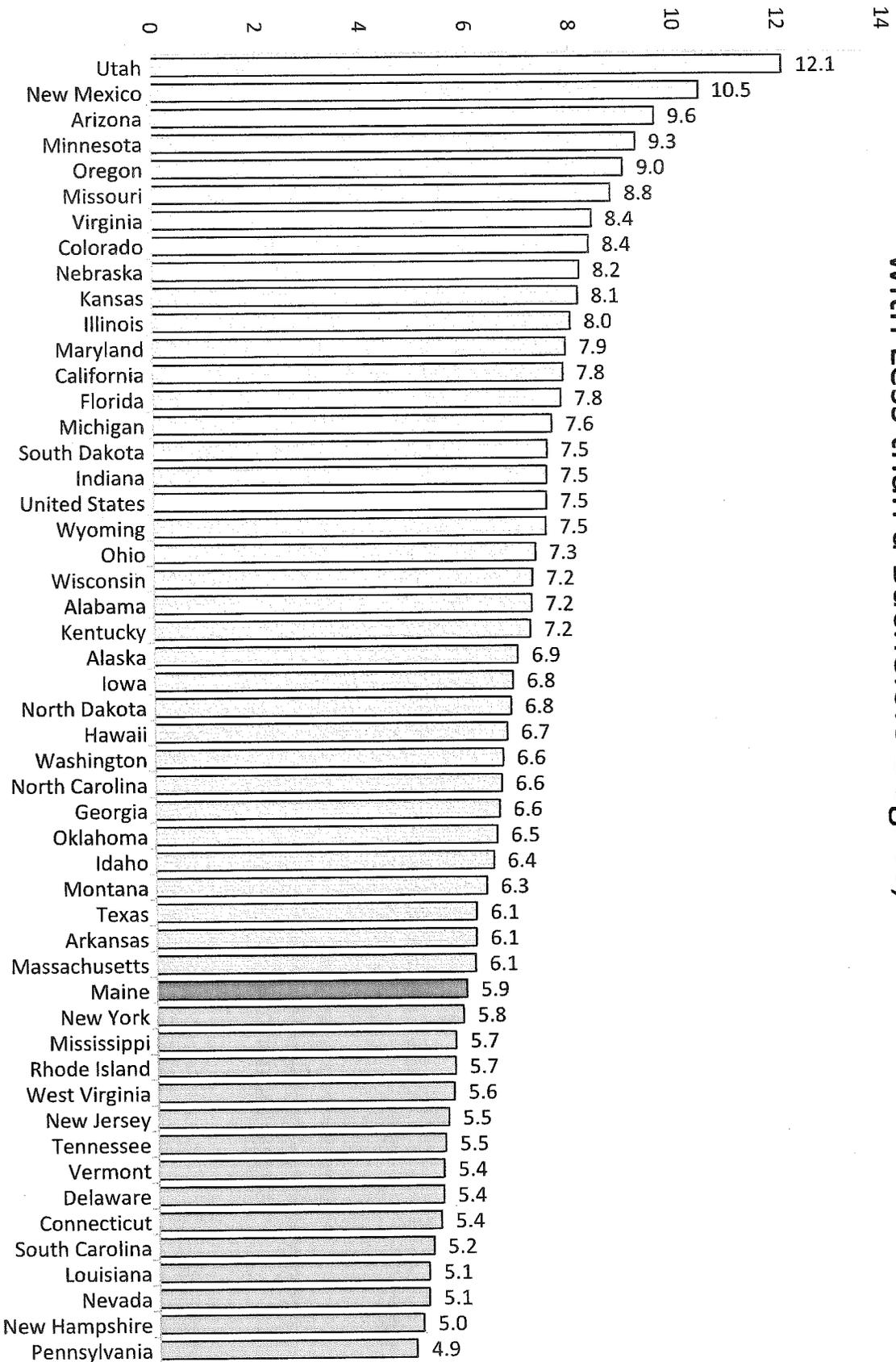
Educational Attainment of Whites and Minorities (Black, Hispanics, Native Americans) Aged 25-44, 2010-12 Maine



Maine High School Graduates 1996-97 to 2027-28 (projected)

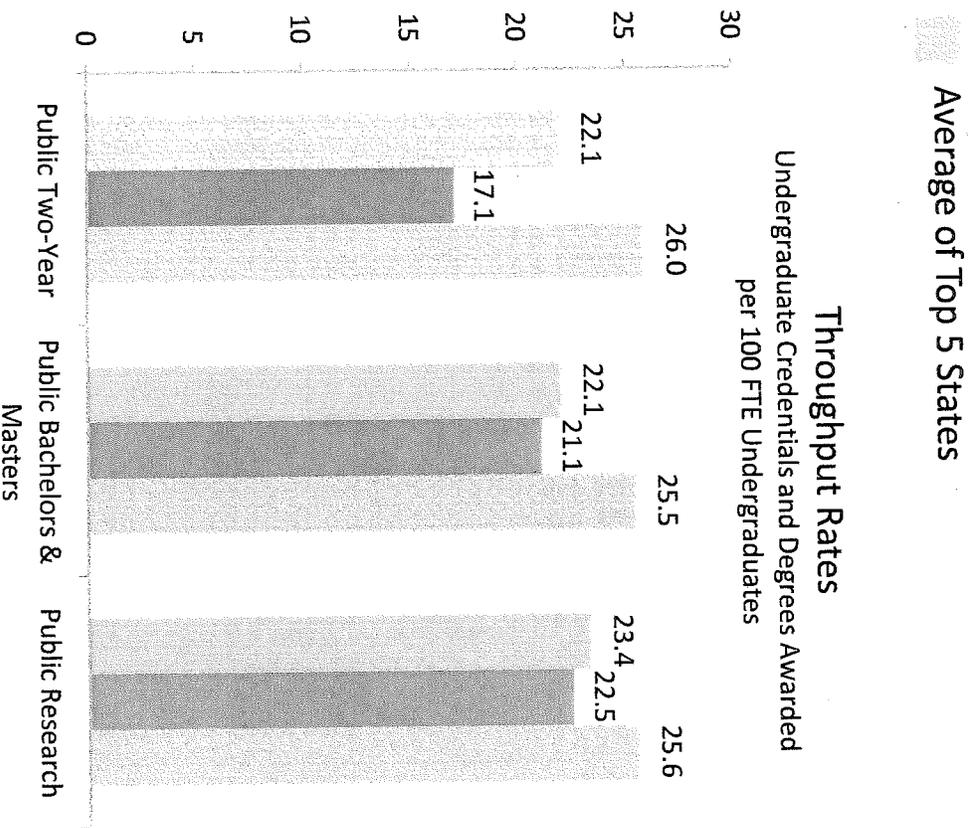
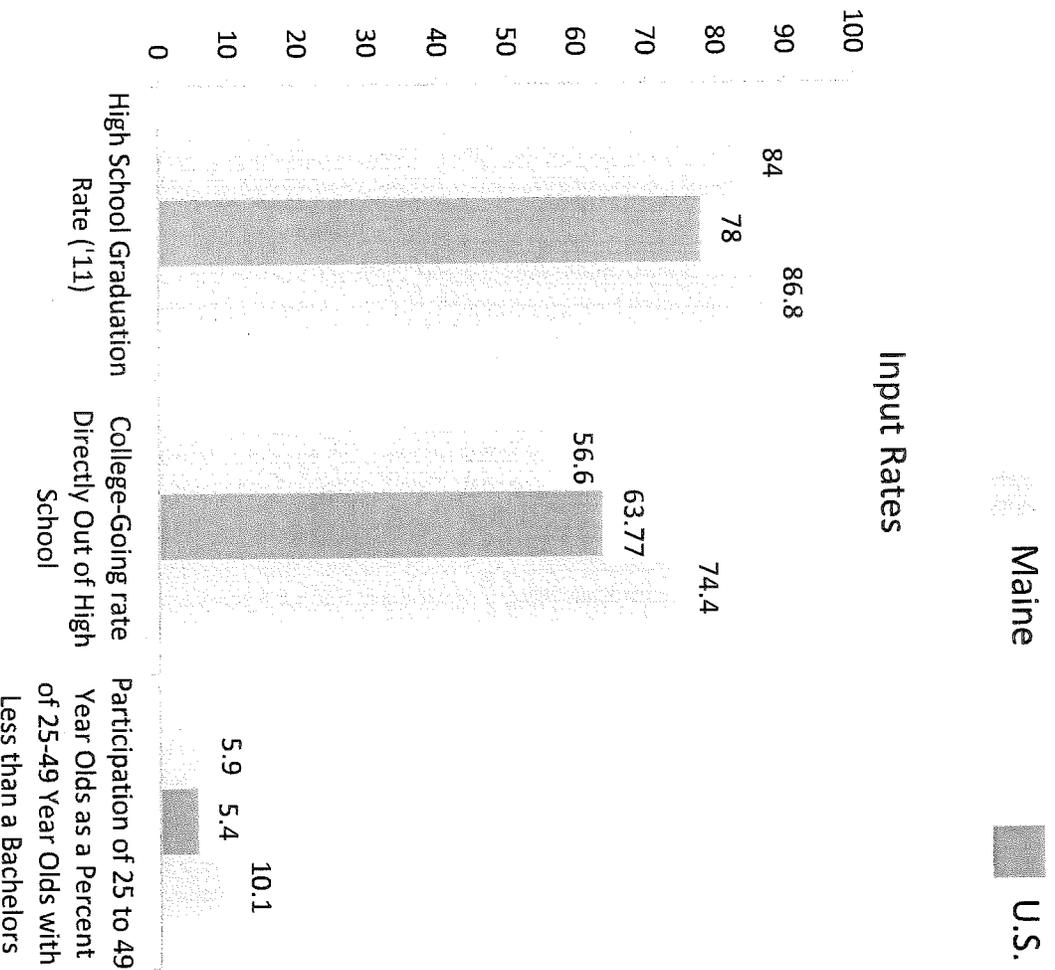


Population age 25-49 Enrolled in College as a Percent of Population Age 25-49 With Less than a Bachelors Degree, Fall 2011



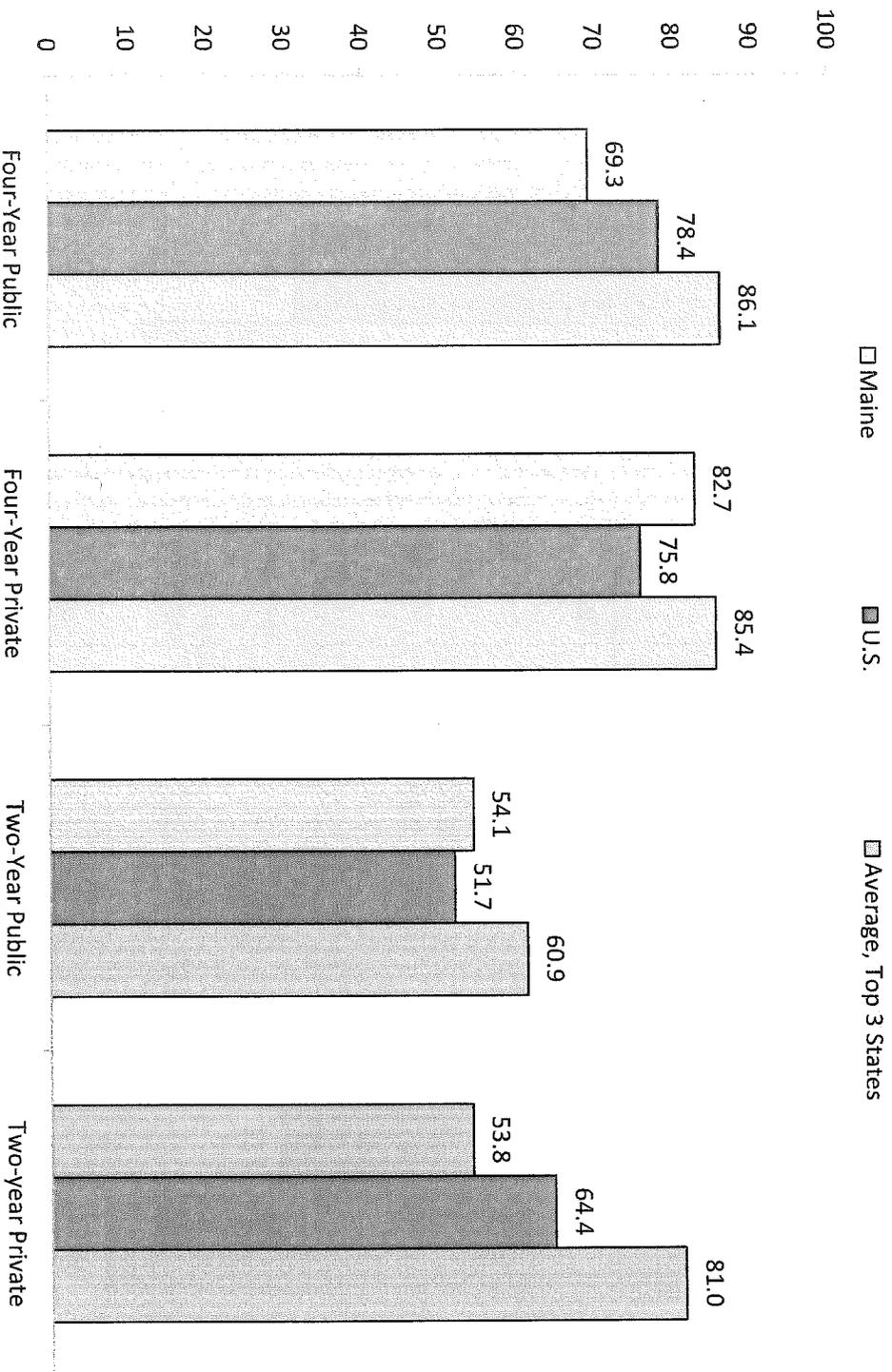
Source: NCES, IPEDS Fall 2011 Enrollment File; eF2011b Provisional Release Data File.
U.S. Census Bureau, 2011 American Community Survey, 2011 State Population Estimates.

High School Graduation, College Participation, & Completion (2011-12)



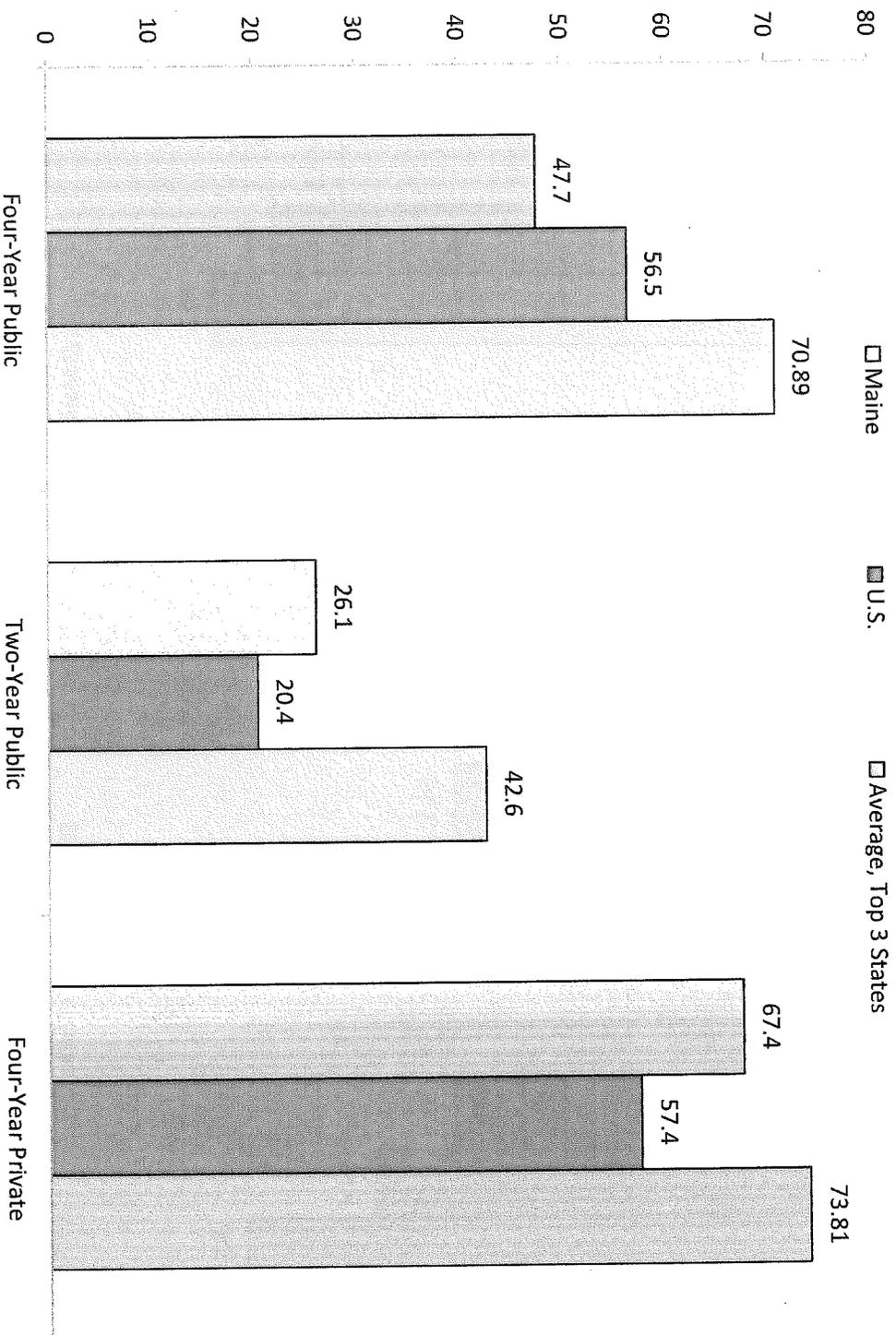
Retention Rates, 2012

Percent of Students Who Re-enroll from First to Second Year



Graduation Rates, 2012

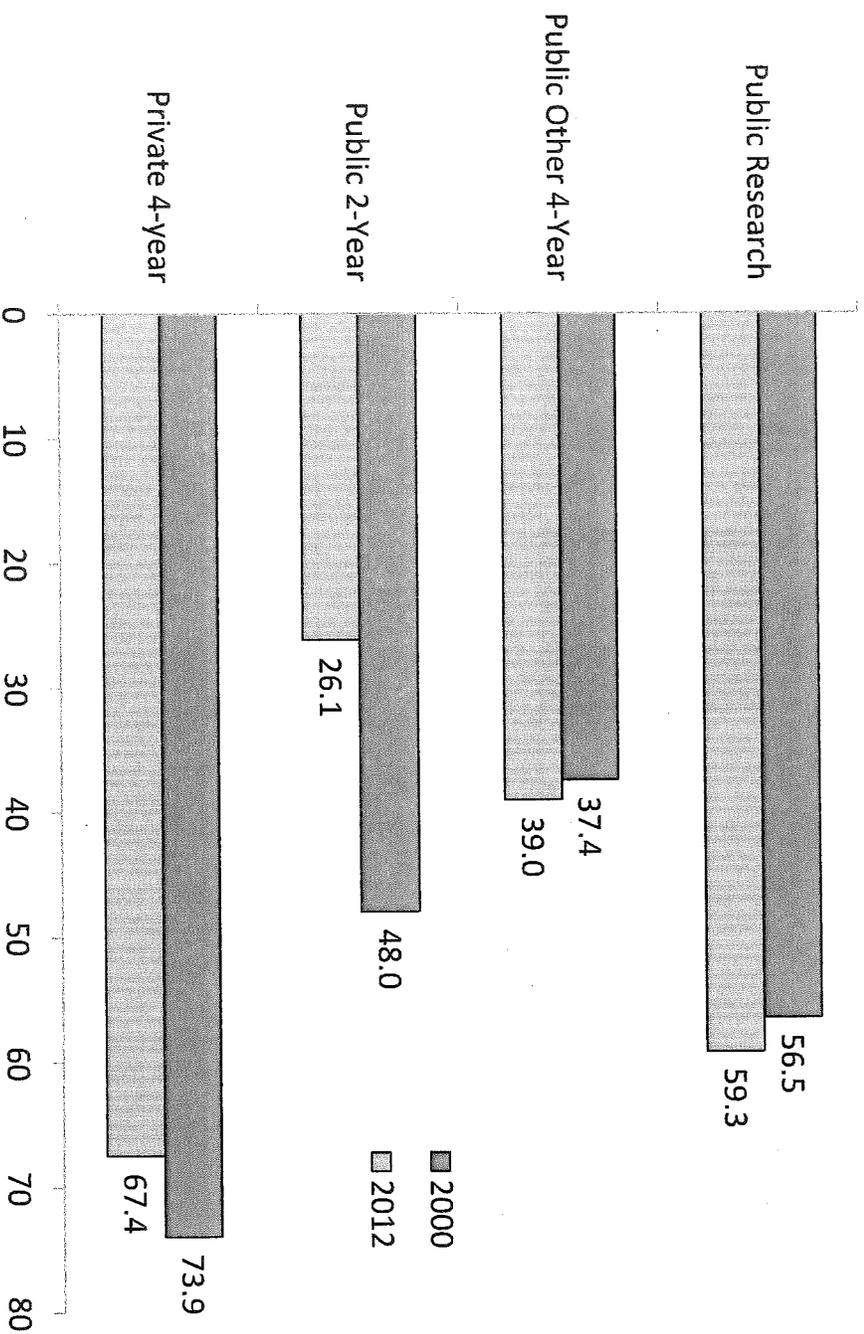
within 3-years for Two Year schools, 6-years for Four Year schools



Completers of any Award Within 150% of Normal Program Time, Fall 2005 Cohort (4-Year Institutions) and Fall 2008 Cohort (2-Year Institutions).

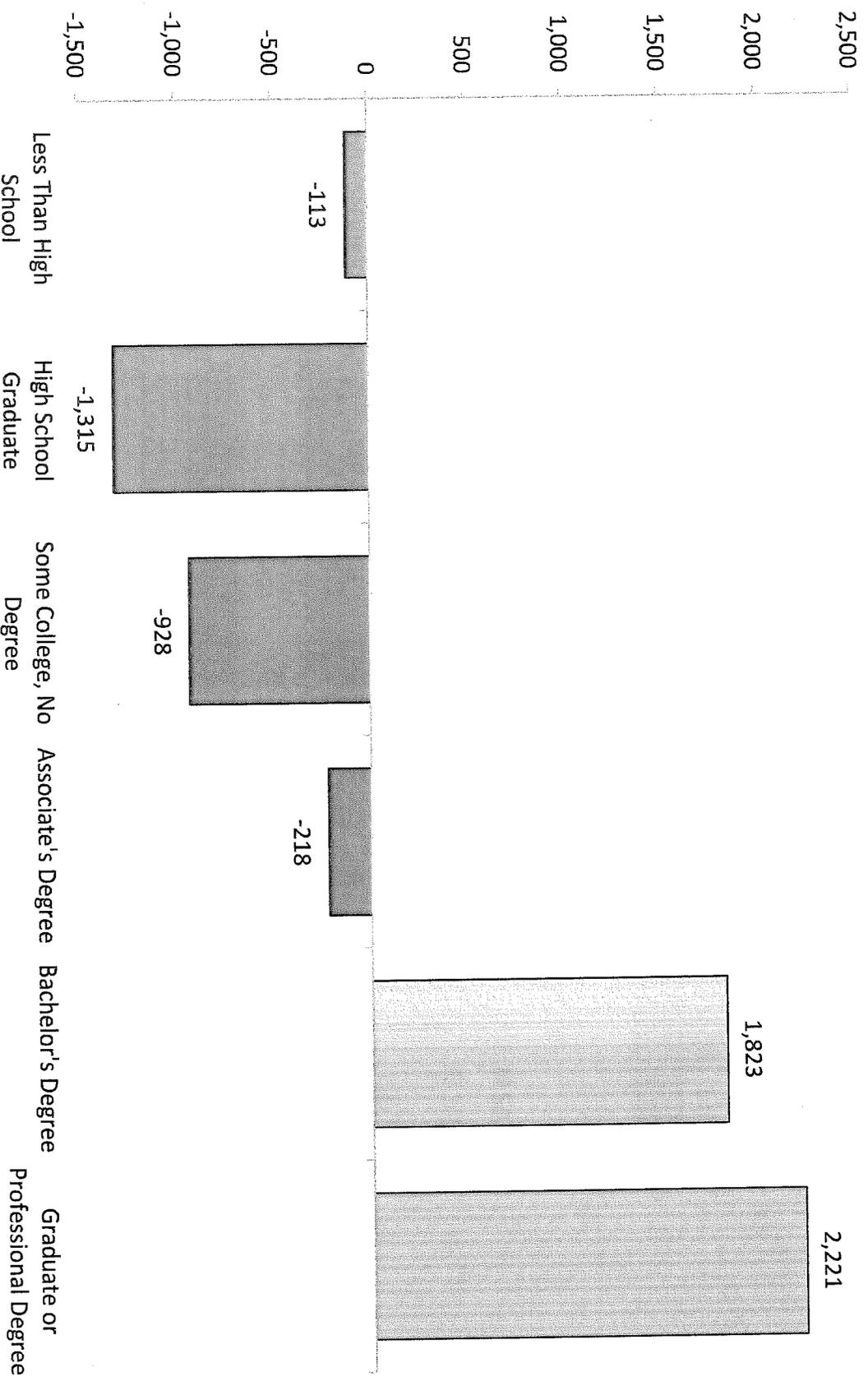
Source: NCES, IPEDS 2010-11 Graduation Rate File; gr2011 Final Release Data File Downloaded 05-29-13.

Graduation Rates in Comparison to 2000, Maine



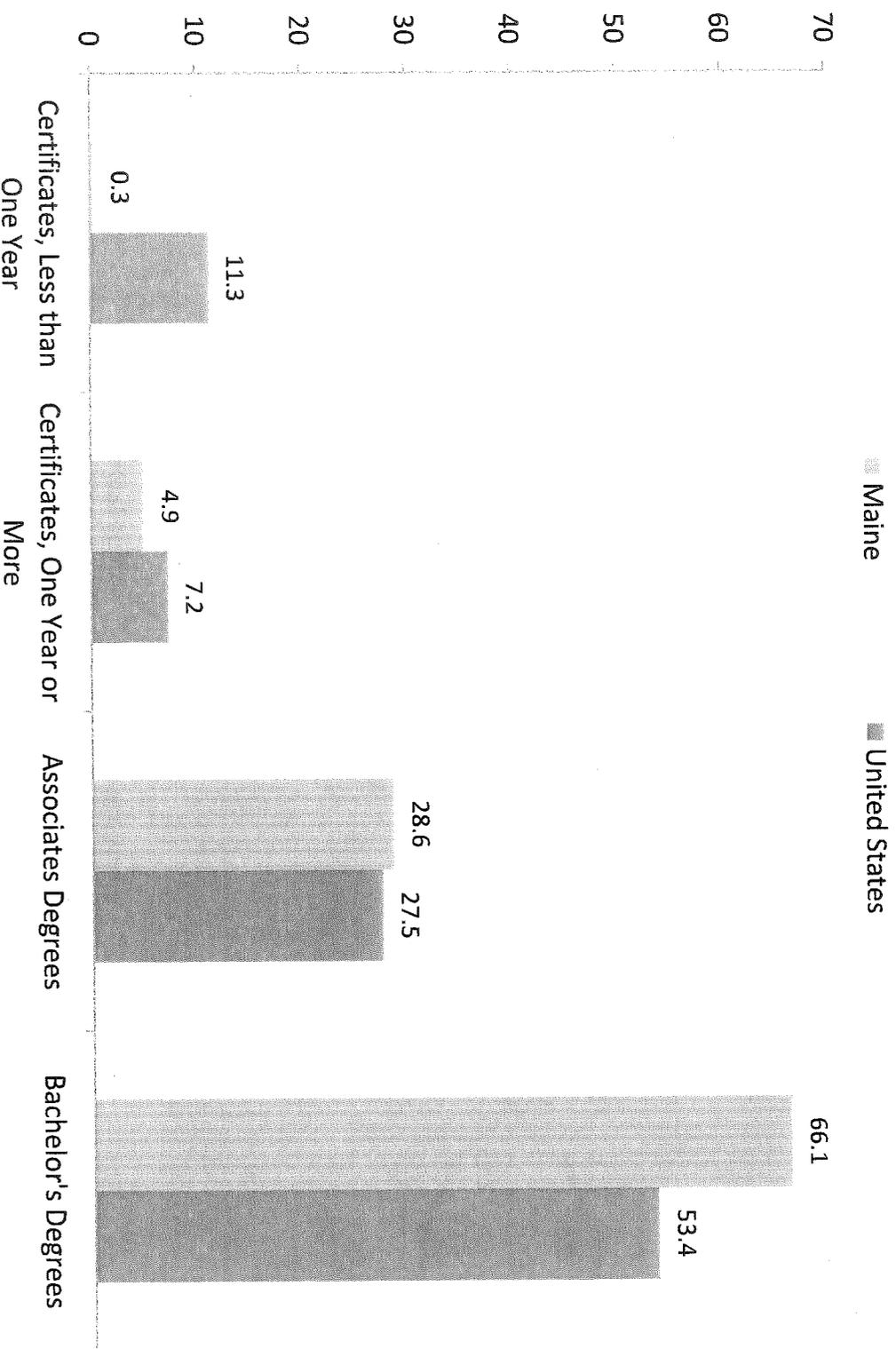
Source: NCES, IPEDS 2011-12 Graduation Rate File; gr2012 Final Release Data File; NCES, IPEDS 1999-00 Graduation Rate File; gr2000 Final Release Data File.

Average Annual Net Migration of 22 to 64 Year Olds by Education Level, Maine, 2010-12

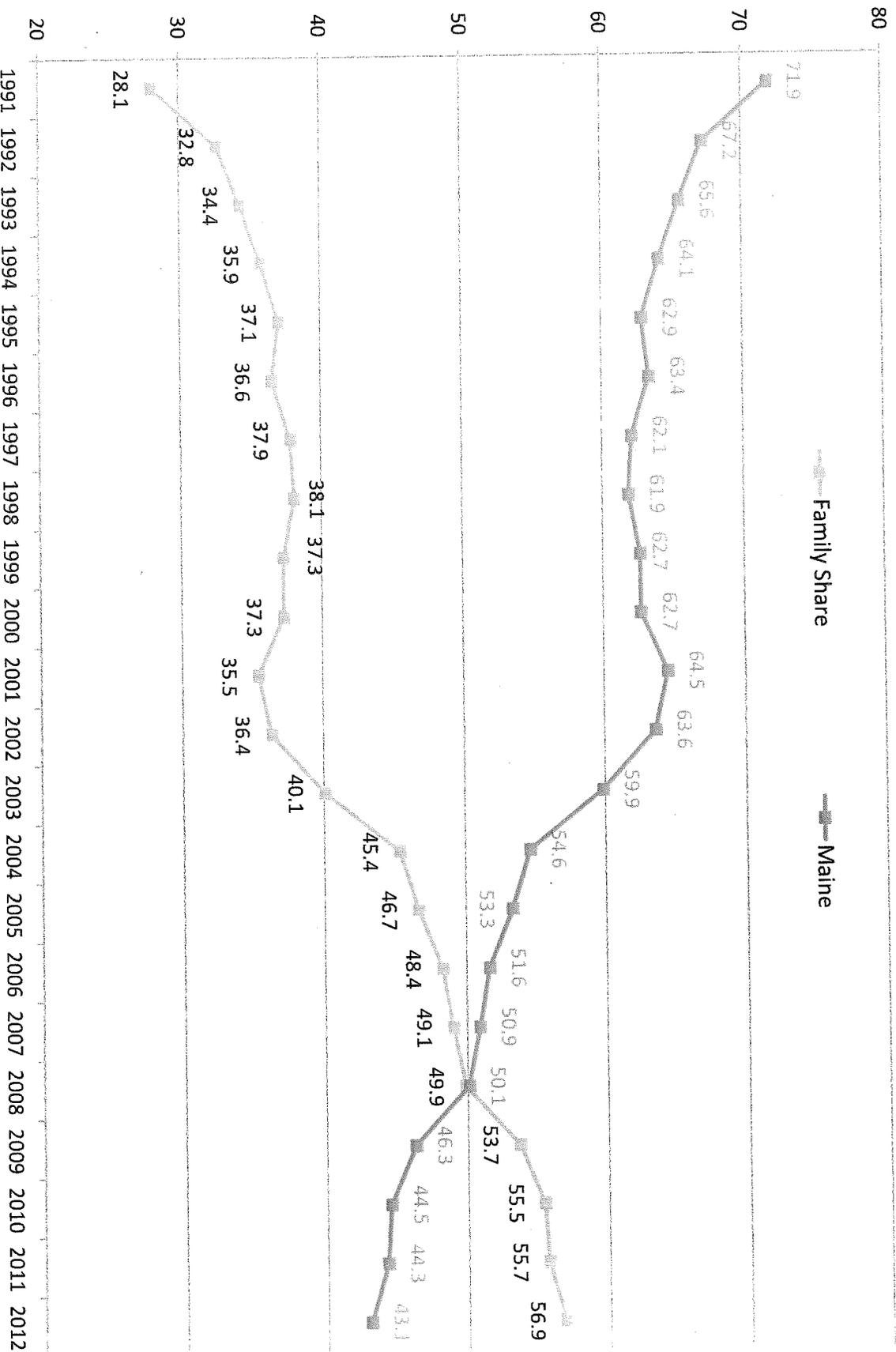


Percent of Undergraduate Awards by Level,

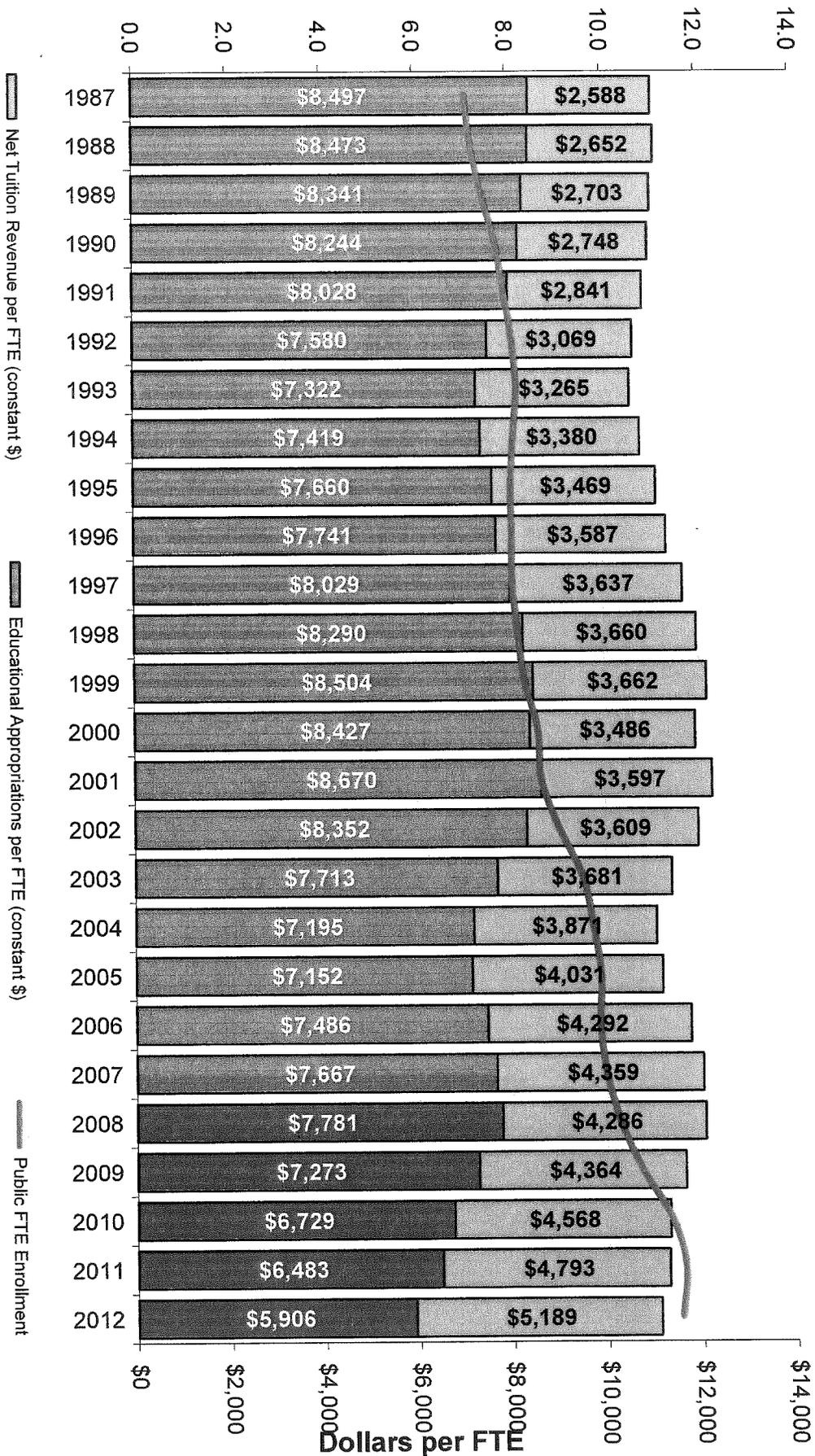
2011-12



Family Share of Public Higher Education Operating Revenues



Public FTE Enrollment (Millions)

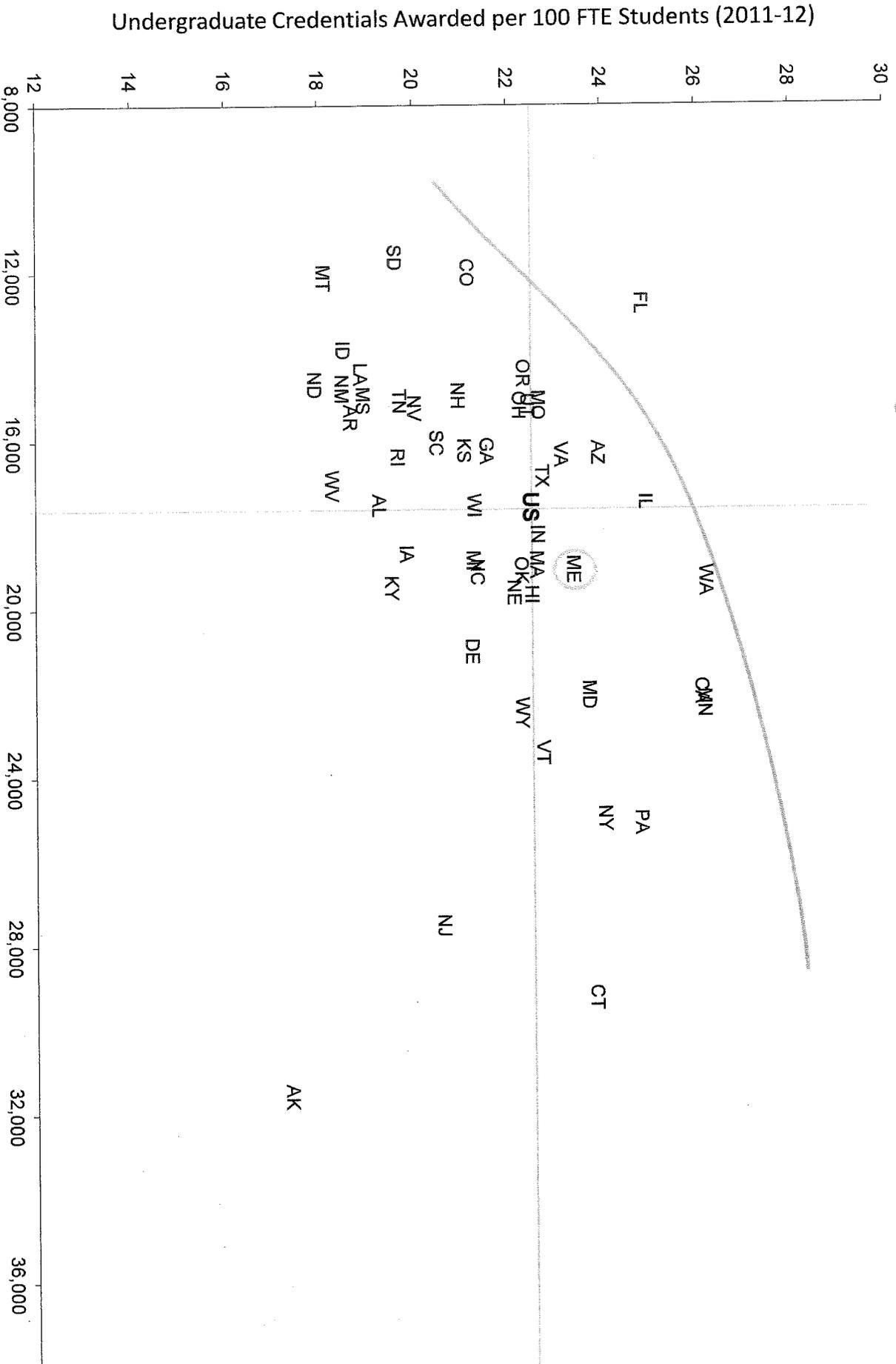


**Public FTE Enrollment, Educational Appropriations and Total Educational Revenue per FTE,
United States -- Fiscal 1987-2012**

Note: Constant 2012 dollars adjusted by SHEEO Higher Education Cost Adjustment. Educational Appropriations include ARRA funds. (HECA)

Source: SHEEO State Higher Education Finance FY12

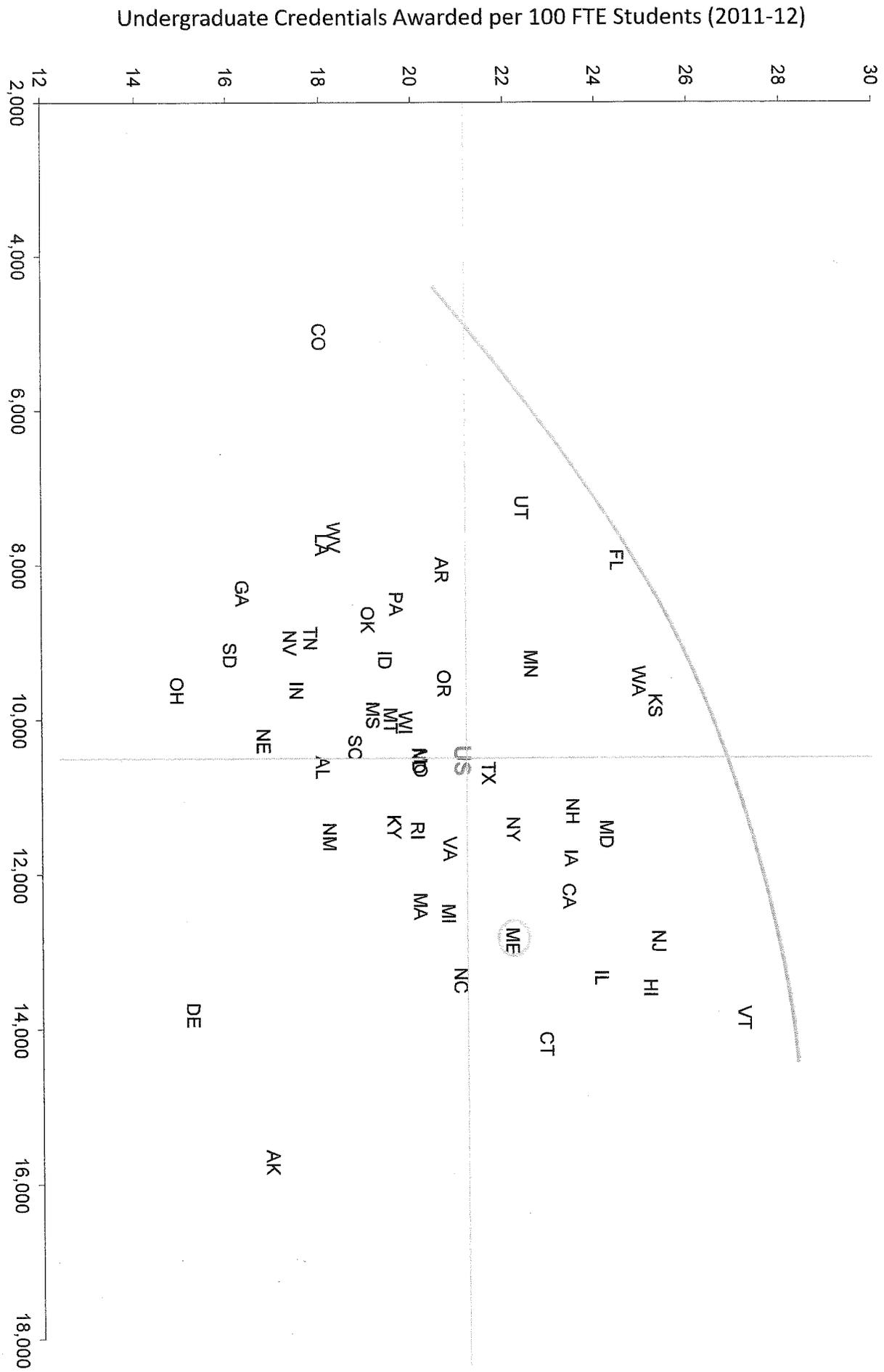
Public Research Institutions: Undergraduate Credentials per 100 FTE Undergraduates and Total Funding per FTE Student



State, Local, and Tuition and Fee Revenues (2010-11)

Sources: NCES, IPEDS Completions, Finance, and Enrollments Surveys.

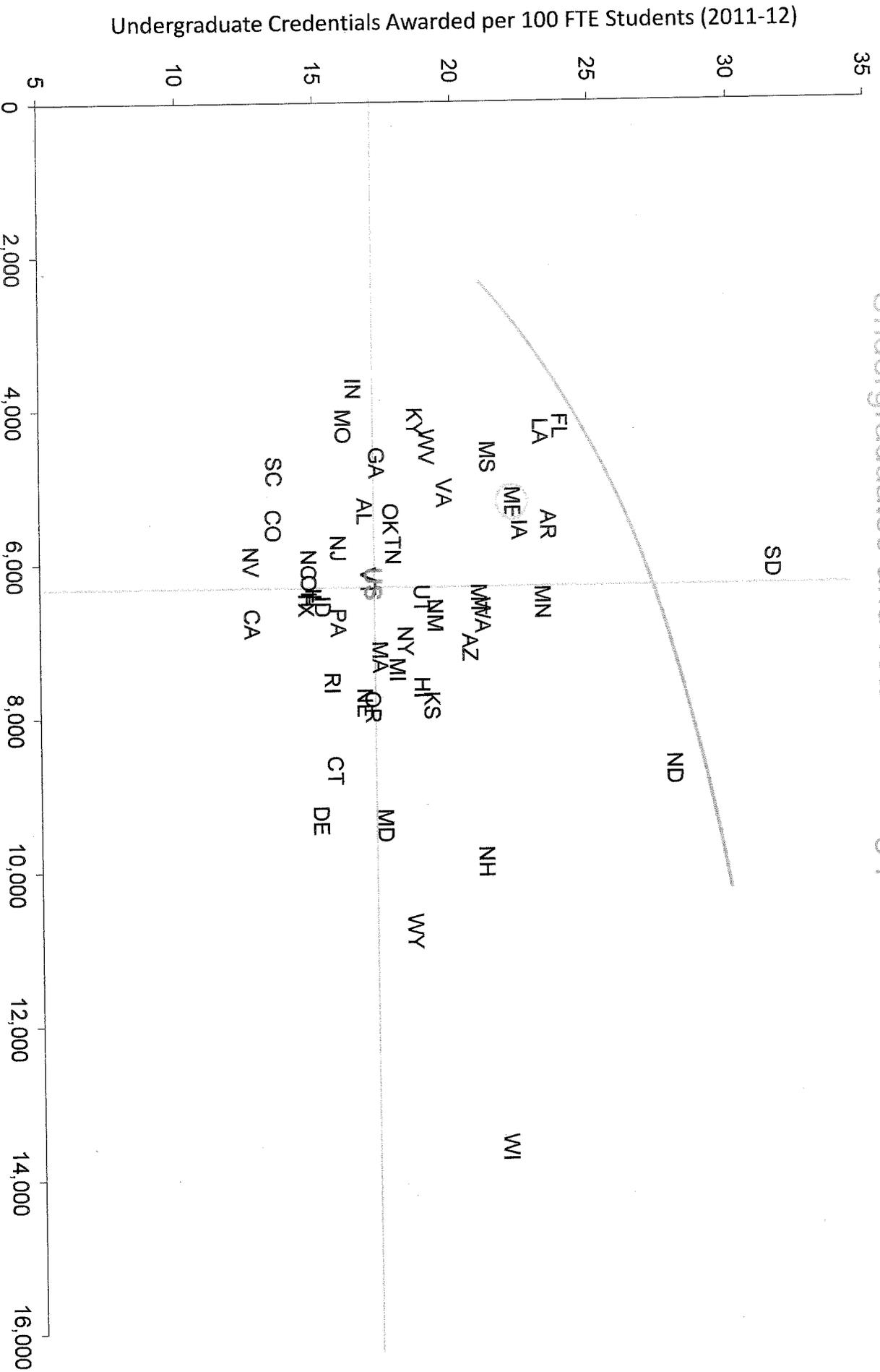
Public Bachelors and Masters Institutions: Undergraduate Credentials per 100 FTE Undergraduates and Total Funding per FTE Student



State, Local, and Tuition and Fee Revenues (2010-11)

Sources: NCES, IPEDS Completions, Finance, and Enrollments Surveys.

Public Two-Year Institutions: Undergraduate Credentials per 100 FTE Undergraduates and Total Funding per FTE Student

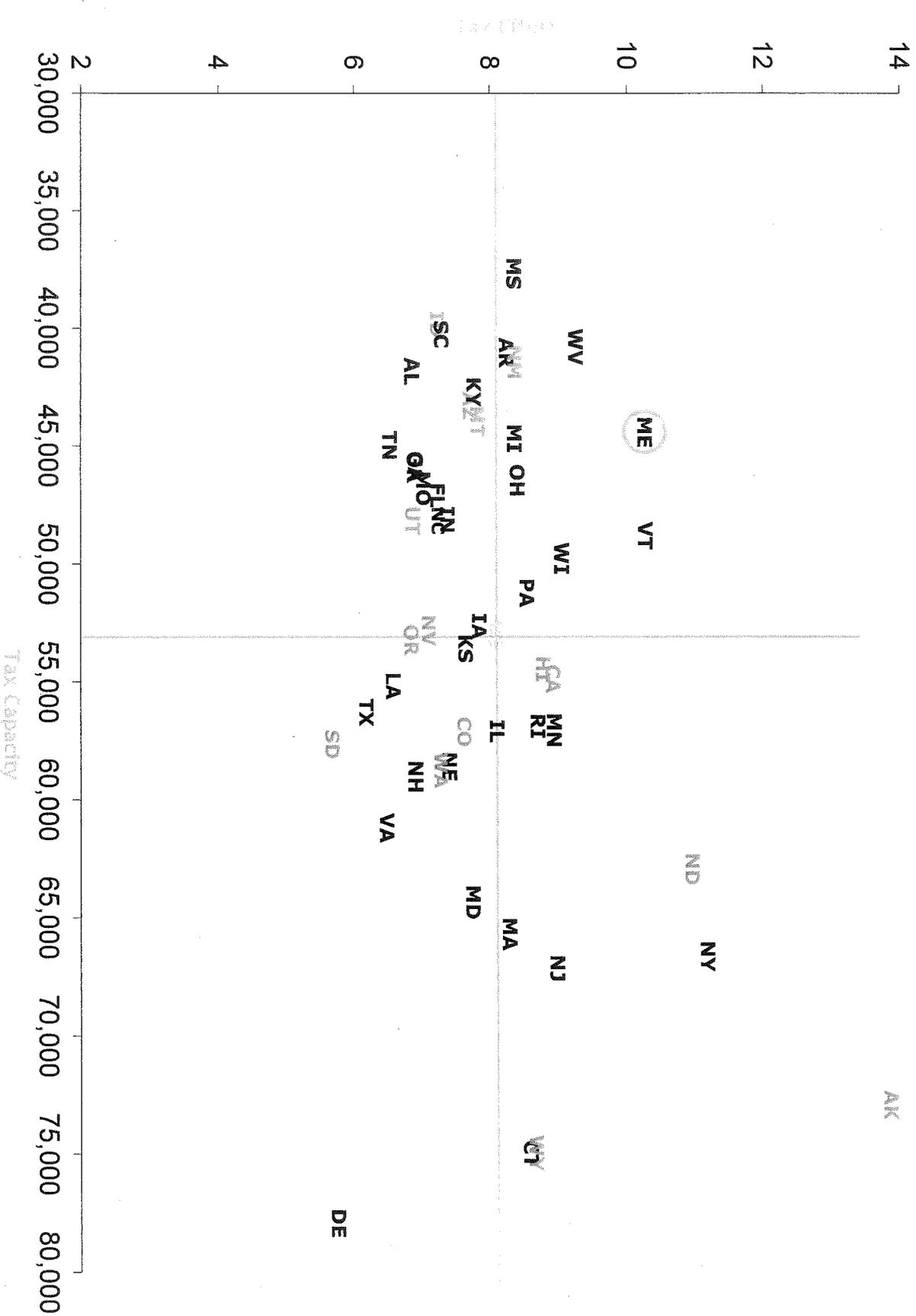


State, Local, and Tuition and Fee Revenues (2010-11)

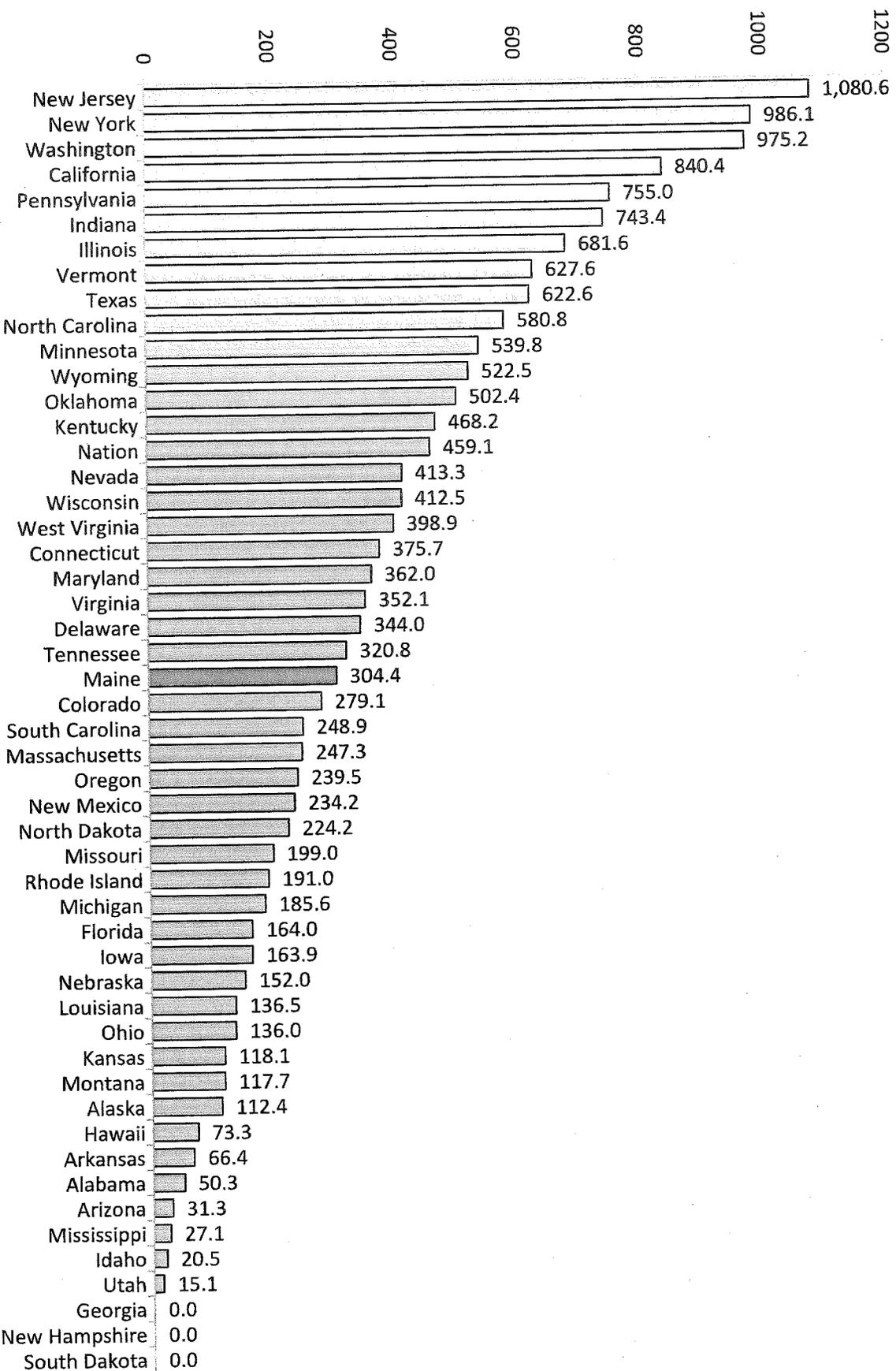
Sources: NCES, IPEDS Completions, Finance, and Enrollments Surveys.

State Tax Capacity & Effort

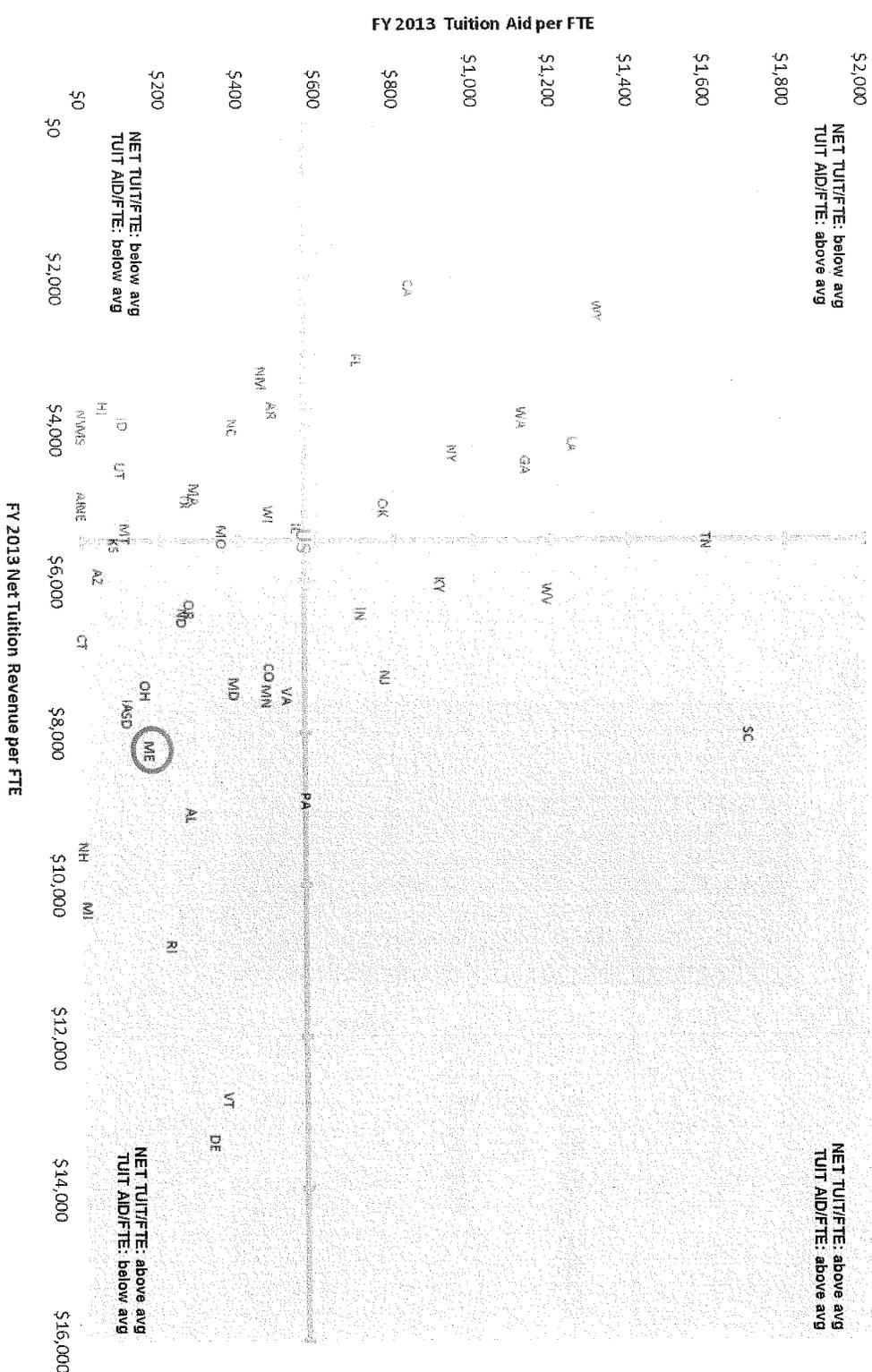
Indexed to U.S. Average, 2011



Estimated Need-based Undergraduate Grant Dollars per Undergraduate FTE, by State, 2011-12

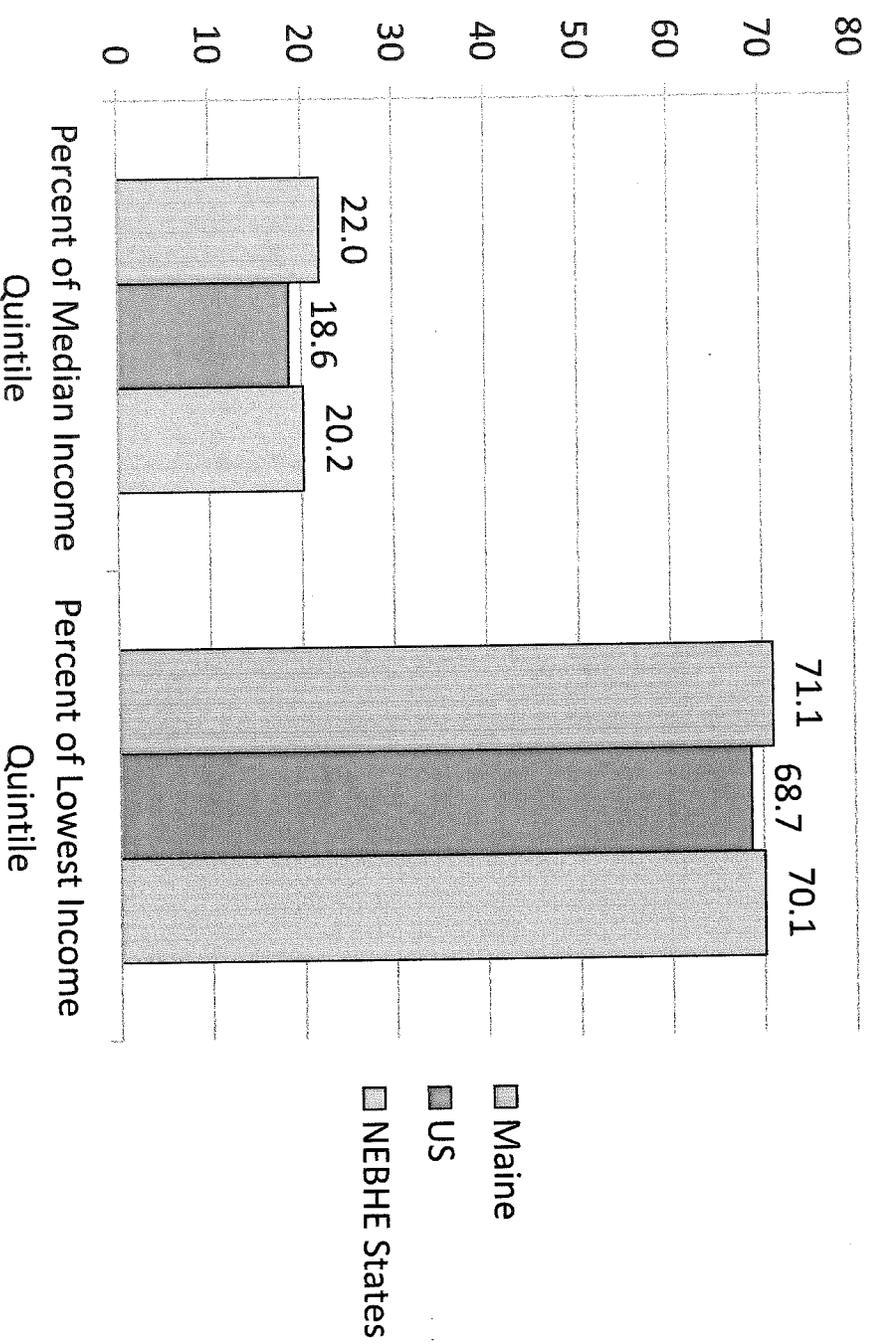


Net Tuition Revenue per FTE and State-Funded Tuition Aid per FTE by State, FY 2013 (Public Institutions Only)



Note: Figures are adjusted for inflation, public system enrollment mix, and state cost of living.

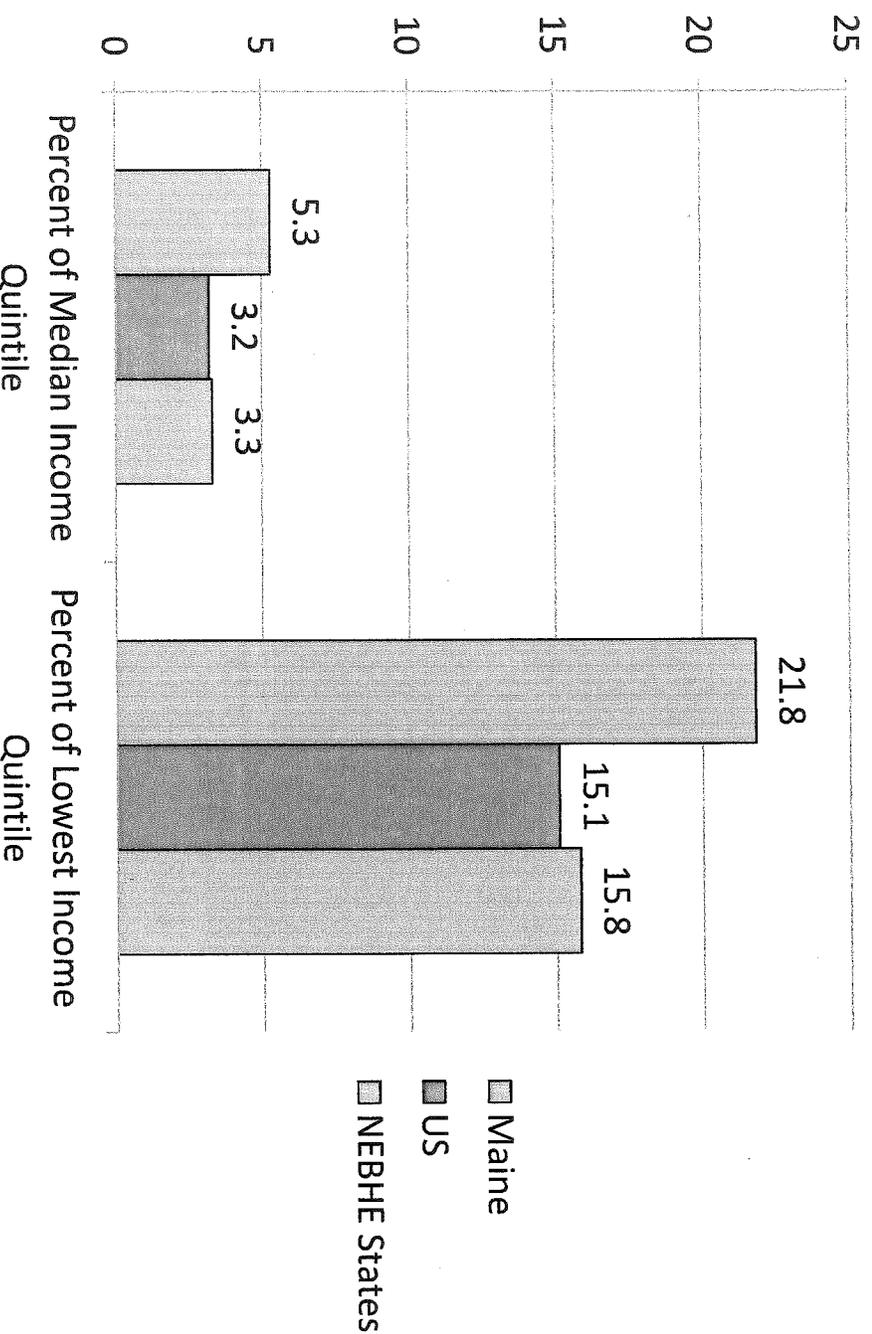
Net Cost for First-Time Full-Time Undergraduates as a Percent of Family Income, Public 4-Year, 2011-12



Sources: NCES, IPEDS Institutional Characteristics Files; hd2012 and ic2012_ay Provisional Release Data Files.; NCES, IPEDS Fall 2011 Enrollment File; ef2011a Final Release Data File; NCES, IPEDS Academic Year 2011-12 Student Financial Aid File; sfa1112 Provisional Release Data File; U.S. Census Bureau, 2012 American Community Survey (ACS) One-Year Public Use Microdata Sample (PUMS) File.

Note: State Costs are weighted averages of published institution charges for first-time full-time undergraduates.

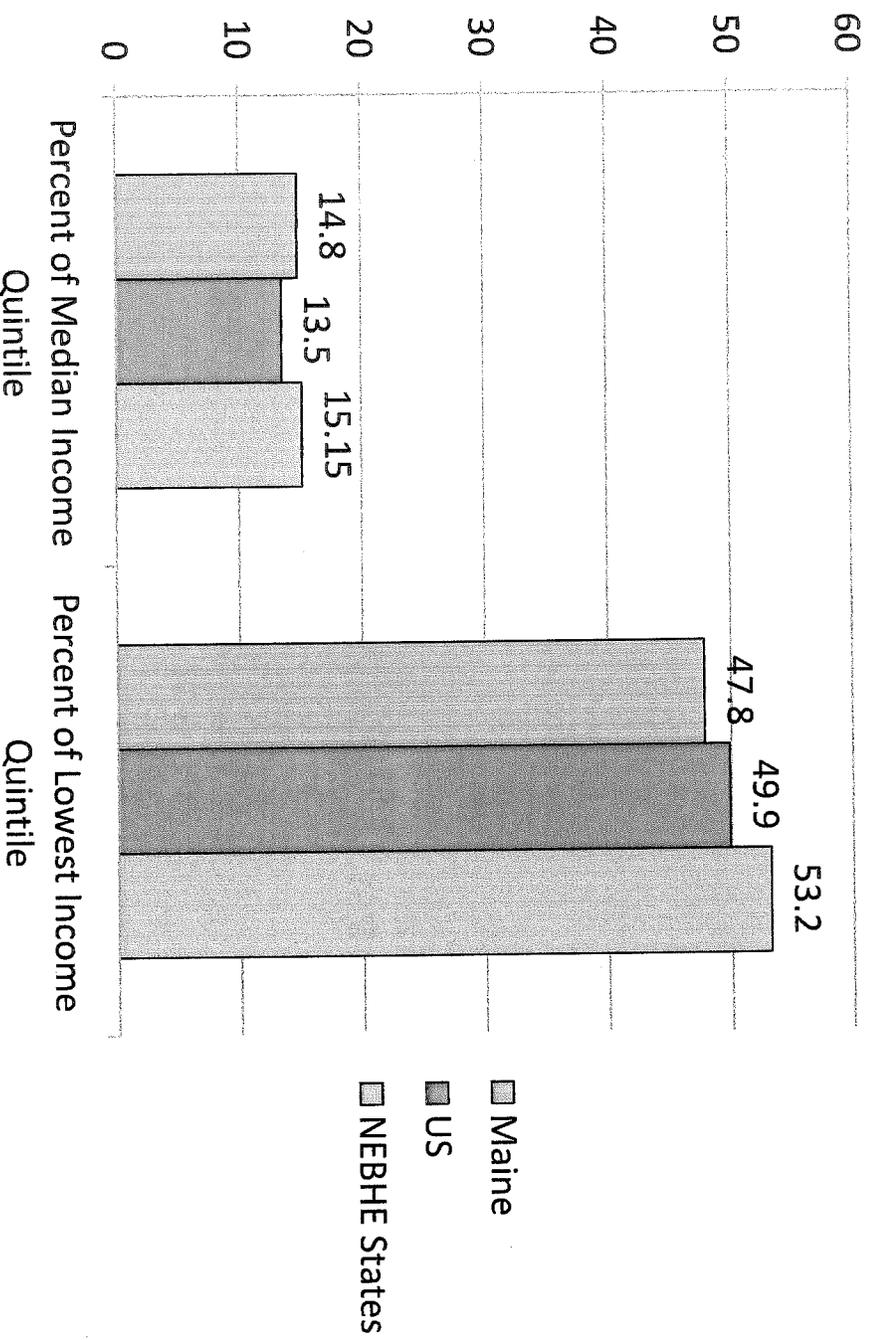
Change in Percent of Family Income Required of First-Time Full-Time Undergraduates, Public 4-Year, 2006-12



Sources: NCES, IPEDS Institutional Characteristics Files; hd2005 and ic2005_ay Provisional Release Data Files; NCES, IPEDS Fall 2005 Enrollment File; ef2005a Final Release Data File; NCES, IPEDS Academic Year 2005-06 Student Financial Aid File; sfa0506 Provisional Release Data File; U.S. Census Bureau, 2006 American Community Survey (ACS) One-Year Public Use Microdata Sample (PUMS) File

Note: State Costs are weighted averages of published institution charges for first-time full-time undergraduates.

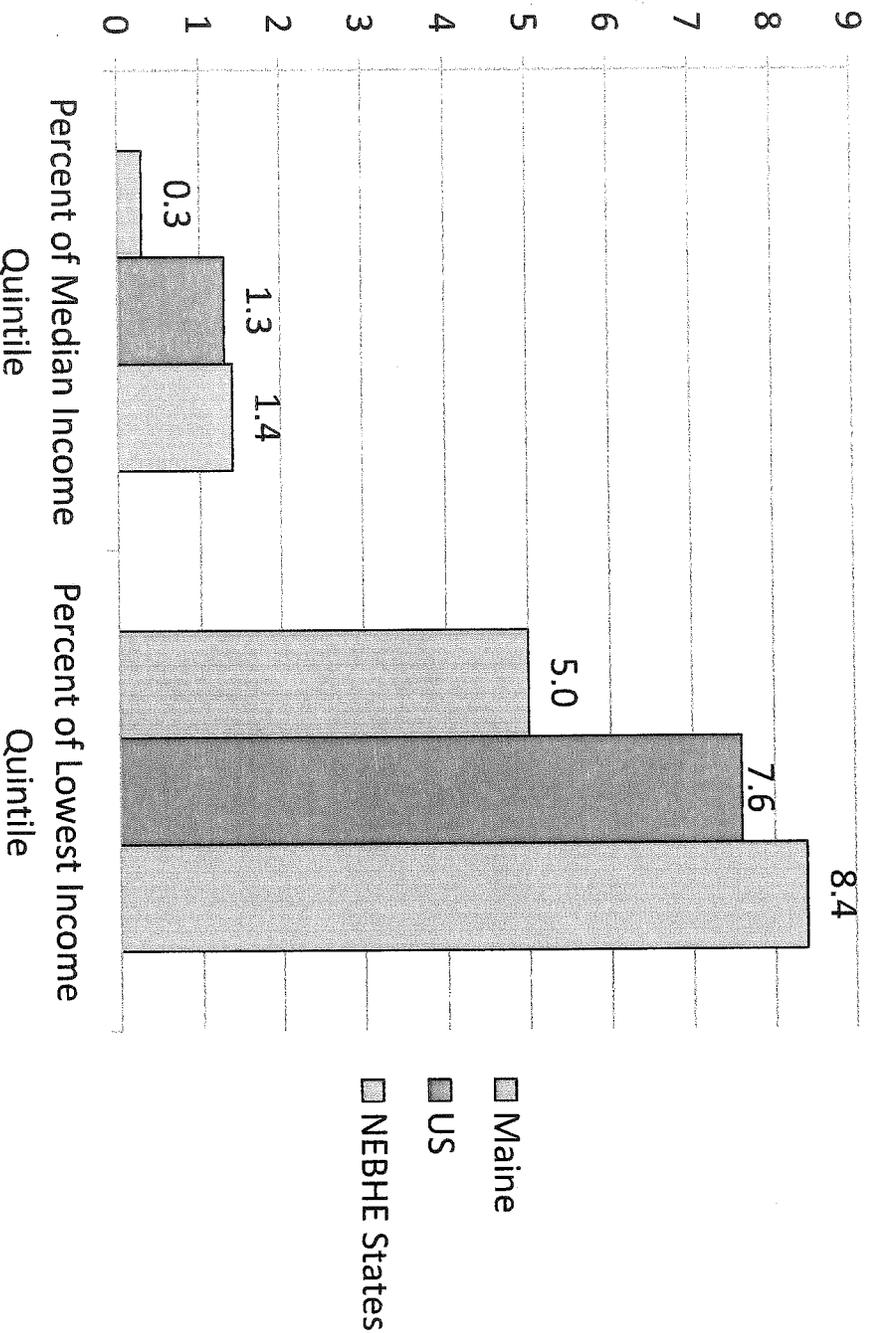
Net Cost for First-Time Full-Time Undergraduates as a Percent of Family Income, Public 2-Year, 2011-12



Sources: NCES, IPEDS Institutional Characteristics Files; hd2012 and ic2012_ay Provisional Release Data Files; NCES, IPEDS Fall 2011 Enrollment File; ef2011a Final Release Data File; NCES, IPEDS Academic Year 2011-12 Student Financial Aid File; sfa1112 Provisional Release Data File; U.S. Census Bureau, 2012 American Community Survey (ACS) One-Year Public Use Microdata Sample (PUMS) File.

Note: State Costs are weighted averages of published institution charges for first-time full-time undergraduates.

Change in Percent of Family Income Required of First-Time Full-Time Undergraduates, Public 2-Year, 2006-12



Sources: NCES, IPEDS Institutional Characteristics Files; hd2005 and ic2005_ay Provisional Release Data Files; NCES, IPEDS Fall 2005 Enrollment File; ef2005a Final Release Data File; NCES, IPEDS Academic Year 2005-06 Student Financial Aid File; sfa0506 Provisional Release Data File; U.S. Census Bureau, 2006 American Community Survey (ACS) One-Year Public Use Microdata Sample (PUMS) File.

Note: State Costs are weighted averages of published institution charges for first-time full-time undergraduates.

